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ABSTRACT

This teaching guide, the third in a five-volume series (see note), concentrates on the CAP (Cognitive, Affective, and Psychomotor domains) approach for teachers to accomodate handicapped students in vocational classes with focus on health occupations education. Main emphasis is on (1) discussion of CAP functioning as these may affect an educational setting: (2) ways to assess and determine functional and dysfunctional capacities; and (3) prescribing for students with various dysfunctions. The latter section provides lesson plans and task descriptions, e.g., making an occupied bed (for nursing assistants), teaching an auditory learner in the Occupational Therapy Assistant Program to improve study skills, "Assertive Behavior Techniques" for those with affective dysfunctions, or developing answers to "problem questions" during job placement. Subsections also deal with some of the problems instructors of the handicapped encounter and such topics as instructing blind students, job redesign, and setting realistic employment goals. A separate section looks at audiovisuals and instructional materials, while the appendix offers a structured exercise in muscle recognition for physical therapy assistant students. (CP)

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THE CAP APPROACH TO MODIFYING VOCATIONAL PROGRAMS FOR HANDICAPPED STUDENTS

VOL. 3 HEALTH OCCUPATIONS

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INTRODUCTION

Why do we need another book telling us how to develop and implement instructional strategies? Don't we already have competency based instruction, modular formats, self-paced instruction, multi-media presentations, and extensive practice in clinical settings? Yes, all these practices exist in many health occupations programs, but how are they utilized? Are students' specific learning problems and skills assessed? Are elements of the modules and multi-media instructional formats tailored to meet the learning needs of specific students? Far too frequently the answer is no. Everyone is expected to utilize the learning packages and modules as presented. For most students this will suffice. They are highly skilled and are capable of learning under the instructor's direction or even in spite of the instructor's behavior.

For others, the instructor's teaching strategy and tactics will spell the difference between success and failure. For these students the instructor must teach. Teaching involves the systematic interaction of instructor and student designed to attain specified and measurable objectives. Teaching also incorporates methods by which the instructor can systematically monitor not only the student's performance, but also the effects of the instructor's behavior on students' performance.

In contrast, many students are not taught, but are exposed to material (primarily through lectures and textbooks) which they are expected to learn, understand, assimilate, and apply. While many students can survive heavy doses of such exposure, it is safe to assume that all could improve their performance if instructions were pinpointed to utilize their learning strengths, overcome or compensate for their learning deficits, and take into account their various learning styles.

But wait! This book is supposed to be about teaching students who

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are disabled. Now its commenting about *all* students. That's right. Good teaching methodology will benefit *all* learners, but for the disabled learner, such systematic teaching methodology can spell the difference between success and failure.

But, you say, we don't *have* any disabled students in our programs. We screen them out. You may *try* to do so, but the current suicide rate among health professionals and the chemical abuse problems present among them would seem to belie this claim. But, more to the point, why *should* you attempt to screen out disabled people. What *evidence* do you have that individuals with certain disabilities can't perform *specified* jobs quite satisfactorily? Aren't you frequently *assuming* that a disabled person wouldn't be capable of acceptable job performance? But, you say, they couldn't perform the tasks required of people in the health fields. They just couldn't. Again, how do you *know*? Have you ever given a disabled person the chance to try, *and* provided some systematic instruction tailored to that person's needs?

"Why should I," you ask. "Apart from legal mandates such as section 504 of the Rehabilitation Act of 1973 and judicial rulings, why should I?" You must develop an answer to this question based on your personal ethical and value system. But in so doing, keep in mind that if you make the philosophical-value *assumption* that "they can't do it" you will not allocate the resources, time, and effort required to make the odds realistic that a particular disabled individual will succeed in a given training program. All the resources, expertise and technology in the world will sit idle if you make a value decision *not* to utilize them, based on the *assumption* that "they" wouldn't benefit anyway.

"Whoa! I still haven't been convinced that 'they' *can* perform acceptably in the health occupations." If you've read this far, you must at least be curious about how this ivory tower outsider who couldn't possibly understand your situation or the demands of your profession proposes to prove to you that disabled people can perform satisfactorily in a health occupations profession. Well, I don't propose to prove anything of the kind, because logic and reasoning are often poor tools with which to chip away at the traditions and practices in which we have invested our intellectual and emotional energies for a lifetime, and which frequently comprise a major portion of the framework of our professional identities. ("If 'they' can do my job what does that say about my status, skills, importance, and value as a professional?") What I do propose to do is offer "some food for thought" and then present a framework in which to view the functioning of persons who are disabled. A series of specific suggestions and examples which could prove effective in dealing with learning problems posed by particular individuals who are disabled is also included.

Food For Thought

First, the "food for thought" items. 1) Review what was said earlier about teaching vs. presentation. Are you a teacher or a presenter? Do your students learn through you or in spite of you? Can you honestly say what effect your specific instructional strategies have on particular students? 2) Examine your assumptions about disabled people. Do you automatically assume that a disabled person can't do something? Why? Are you sure? Are you frightened at the thought of a disabled person succeeding in your field? Are you afraid that your area will become a second class profession if word gets around that you not only accept disabled candidates into your program, but also that several have even completed the program successfully? 3) What do you think of when someone mentions a particular disability? What mental pictures present themselves when you think of "learning disabled?" When you think of "paraplegia?" "Blindness?" "Deafness?" "Emotional disturbance?" "Chemical abuse?" Chances are, many of your mental images convey qualities of helplessness, hopelessness, incompetence, dependence, and sickness. Some of your mind pictures might also express attitudes of aversion, distaste, fear, or dislike. Though such reactions are not unheard of, they are very detrimental not only to disabled persons with whom you work or come

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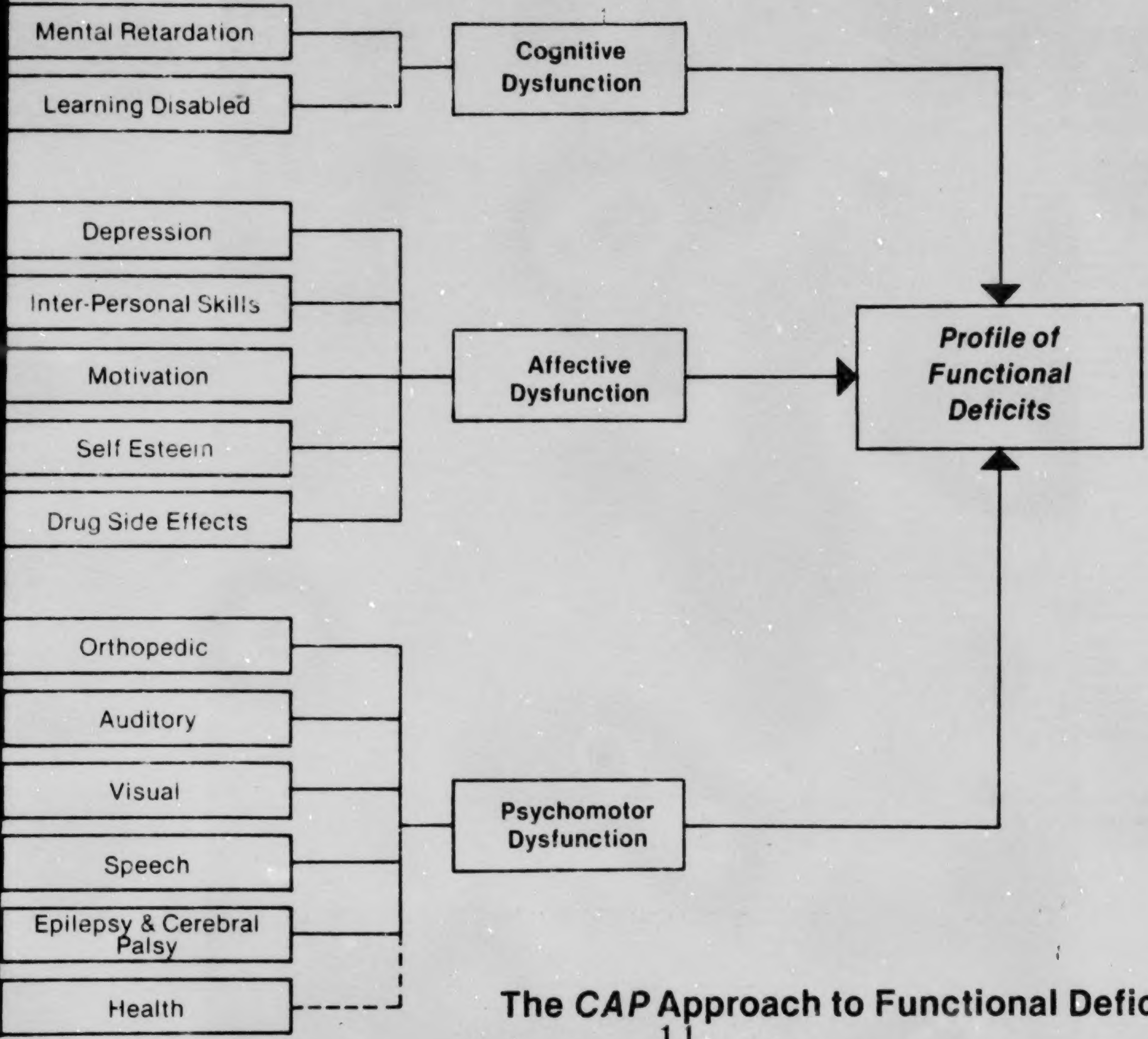
into contact, but also to your own growth as a well rounded person who can delve beneath surface impressions and stereotypes.

To adjust any negative stereotyping which may have manifested itself in your mental images, consider the implications of the following equasion: disability ≠ handicap ≠ "sick" ≠ total incapacity. A disabled person may have impaired functioning in one or more bodily systems, but whether or not that person is handicapped in a job *depends on what must be done*. (What *must* be done is not the equivalent of what has "always" been done. Routines were established for a reason and they can be altered for a reason.) A disabled person is *not* by definition sick or dependent. Many, if not most disabilities are limited and stable. Progressive degenerative diseases are an exception, of course, but most disabilities are *not* in this category. A hearing impaired, blind, or learning disabled person (to name a few) can be as "healthy as a horse," "strong as an ox," or "sharp as a tack." He or she could be capable of selling refrigerators at the north pole, or coal in Newcastle. In short, he or she could be highly talented, capable, willing, and able to learn complex technical skills.

This does not mean that someone who is disabled will have *no* problems. It does mean that, like anyone else, a disabled person can acquire a range of skills and abilities which can be utilized. It does mean that some aspects of a disabled person's functioning will be impaired. But such impairment has no *a priori* relation to the level at which this disabled person can achieve using unimpaired functions and/or compensatory mechanisms.

Because it does a great disservice to disabled people to categorize them, and infer from the resulting label that one knows all he or she needs to know about them, we would like to suggest an approach to the education of persons with disabilities that attempts to view each person in terms of his or her functional strengths and weaknesses, rather than in terms of a category or label.

FIGURE ONE


Mental Retardation
Learning Disabled
Cognitive Dysfunction
Depression
Inter-Personal Skills
Motivation
Self Esteem
Drug Side Effects
Affective Dysfunction
Profile of Functional Deficits
Orthopedic
Auditory
Visual
Speech
Epilepsy & Cerebral Palsy
Health
Psychomotor Dysfunction

The *CAP* Approach to Functional Deficits

FIGURE ONE CONT.

The *CAP* Approach to Functional Deficits

Cognitive Dysfunction

MENTAL RETARDATION

Mental retardation refers to significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behavior, and manifested during the developmental period (American Association on Mental Deficiency, 1973).

Mild - IQ 55-69. Retardation occurs mainly because of environmental (culture, family) reasons although minimal brain damage and other medical factors (where damage is not severe) can contribute to the level of dysfunctions. Adequate social and communication skills can be developed.

Moderate - IQ 40-54. Retardation occurs mainly because of medical causes. Can learn to talk and communicate but have problems in social awareness.

Severe - IQ 24-39. Retardation occurs because of medical causes. It is accompanied by poor motor development. Learning elementary speech and health habits is possible; functional academic skills are not.

Profound - IQ 0-23. Cause of retardation is medical resulting in extreme physical and mental deficiencies. Frequently institutionalized for activities of daily living.

LEARNING DISABLED

Disorders in one or more of the psychological processes involved in the understanding or using of the spoken or written language. Disorders may occur in listening, talking, reading, writing, spelling, or doing mathematics and may be perceptual handicaps, brain injuries, brain dysfunctions, dyslexia, or developmental aphasia.

Affective Dysfunction

DEPRESSION

Depression is a mental disorder characterized by little emotion, sadness, slow mental and physical activity, fatigue, despondency, feelings of worthlessness and dejection. Students suffering from depression may show any combination of these symptoms in the classroom.

INTERPERSONAL SKILLS

Students who have learned inappropriate ways of dealing with other individuals frequently show the following behaviors: difficulty in dealing with criticism, disruption, manipulation, difficulty in working in group situations, and unwillingness to conform to rules and regulations. These behavioral problems can be overcome by instilling proper interpersonal skills.

MOTIVATION

A student's motivation may be considered factors which drive him/her, thereby stimulating him/her to perform thus affecting the intensity and persistence of that effort. Problems of motivation may be manifested in attendance and punctuality problems, erratic performances generally well below the students' capabilities, a high rate of distractibility, a negative or irresponsible attitude towards work, little concern over performance and much time and effort spent in unconstructive ways.

SELF ESTEEM

Self esteem can be described as the extent to which an individual feels good about him/herself. Students with low self esteem usually question their worth or values as human beings, tend to be negative and anxious, lack self-confidence, are failure oriented, unassertive and have low performance standards and vocational goals.

DRUG SIDE-EFFECTS

Many people find themselves in situations in which they are bored, frustrated, lonely and face excessive stress. Drugs can be prescribed to counteract these moods but these drugs have side-effects that affects a student's performance. Common examples of drug side-effects are drowsiness, blurred or double vision, nausea, memory impairment, coordination difficulties, confusion, dizziness, hyperactivity and thirst. These problems can be alleviated by prescribing smaller dosage or alternative medications for the student.

Psychomotor Dysfunction

ORTHOPEDIC

The orthopedically impaired person is one who has a crippling impairment which interferes with the normal functioning of bones, joints, and muscles to such an extent that special arrangements must be made by the school. Individuals who are victims of polio, arthritis, and muscular dystrophy fall into this category.

AUDITORY

Persons with auditory handicaps may have difficulty in hearing in one or both ears or may not hear at all. Hard of hearing persons are classified as having slight, mild, or marked losses and are educated through the auditory channel after compensation is made for hearing loss. Deaf persons are classified as those with severe losses and are educated primarily through sense modalities other than the ear.

VISUAL

Vision impaired persons are classified for educational purposes into two categories - the visual impaired who can read print and the blind who can learn to read braille.

SPEECH

Speech defects can be grouped to include disorders of articulation and voice, stuttering, and speech disorders associated with hearing loss, cleft palate, mental retardation and cerebral palsy. Speech clinicians can deal with speech, language problems and related communication disorders.

EPILEPSY AND CEREBRAL PALSY

Epilepsy and cerebral palsy directly proceed from brain activity. Epilepsy is a neurological condition caused by abnormal discharges to the brain resulting in one of four kinds of seizures: Grand Mal, petit mal, Jacksonian and Psychomotor. Cerebral palsy, caused by damage to the brain during or shortly after birth, results in ineffective control of muscles by the brain, thus restricting a person's motor activities.

HEALTH

Health impaired persons are those with special health problems e.g. rheumatic fever, congenital heart defect, diabetes, respiratory disorders (cystic fibrosis, asthma, tuberculosis) and hemophilia. These health impairments, though not strictly psychomotor in nature, do restrict a students' movements and activities in the classroom.

The CAP Model

This approach, the CAP method, allows an educator to analyze each person's performance and prescribe educational experiences which focus on remediating or compensating for problems and utilize the student's strengths. "CAP" refers to cognitive, affective, and psychomotor functioning. Any person who is disabled (or anyone else for that matter) functions at various levels in the cognitive, affective, and psychomotor domains. Two persons with the same label (e.g., paraplegia) can be quite different in their functional abilities and limitations. Since the label tells so little about this person's functional profile we would suggest a strong emphasis on viewing each student in terms of his or her cognitive, affective, and psychomotor functioning, rather than in terms of a categorical label and its accompanying stereotypes.

Figure one shows how old diagnostic categories can be integrated into a unified approach to the analysis of their functional manifestations. Such an analysis, in turn, makes possible the creation and implementation of an individualized approach to the development of compensatory or remedial educational (and employment) strategies. Since even stabalized health problems often have a major impact on a person's psychomotor functioning in terms of mobility, endurance and other factors, "health problems" were included in the psychomotor portion of the chart. Everyone with major problems in learning and/or performance will manifest them cognitively, affectively and motorically, but one domain or the other is ordinarily the focus of the major functional deficits.

In a class setting this approach would necessitate the development of whatever modifications were necessary to produce an appropriate educational training program. The extent of such change is frequently minimal, but is dictated by specific functional deficits manifested by individual students.

Categories To Consider

The following is a summary of "categories to consider" when developing instruction to meet the needs of particular disabled students:

A. Assessment & Evaluation Results

  1) Do any exist?
  2) Are they available to me?
  3) Do I have the skill necessary to utilize them?

B. Students' Employment Goals

  1) interests
  2) aptitudes
  3) prior work experience
  4) current functional job skills
  5) job skills needed - number and type
  6) supervision issues - what is likely to be available vs. what the person needs
  7) potential stress factors
  8) physical demands
  9) transportation factors

C. Occupational Information

  1) availability
  2) accuracy
  3) utility

D. Modification in the School's Physical Plant

  1) classroom
  2) labs
  3) equipment
  4) accessibility
  5) lavatories

E. Course Content

  1) number of objectives - skills - concepts to be taught
  2) tasks & subtasks which operationalize objectives
    a. number
    b. success criteria
    c. requisite conditions of performance
  3) time constraints
  4) reading levels required
  5) math levels required, if applicable
  6) order of presentation
  7) rate of presentation

F. Lesson Plans

  1) selection & sequencing of tasks and subtasks
    a. for use by entire class
    b. for use by individual students

G. Text, Manual, Workbook

H. Teaching Materials and Aids for Teacher Use

I. Learning Materials and Aids for Student Use

J. Classroom Management Procedures

K. Teaching Procedures

  1) for use with entire class
  2) for use with the handicapped student on an individual basis; techniques for providing feedback concerning performance

L. Testing Students for Mastery of Course Material

  1) content
  2) procedures

M. Recordkeeping

   1) type
   2) quantity

N. Grading and Techniques of Monitoring Progress

   1) types
   2) criteria

O. Emotional Climate of Classroom

   1) feelings of non-handicapped students
   2) feelings of handicapped students
   3) teacher's feelings

P. Supportive Services

   1) types required
   2) availability
      a. in-house
      b. outside agencies

Q. Coordination of Professional Services to Student

   1) role definition
      a. in-house staff
      b. outside agency staff

R. Administrative Policy

   1) class placement
   2) grading and graduation requirements
   3) support services
   4) time factors
      a. open entry-exit
      b. fixed enrollment periods
      c. limits for completion

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S. Employer Contact - Job Placement

1) student's role
    a. job seeking skills
    b. interviewing skills
2) staff role - definition, scope

T. Follow-Up

1) role definition
2) planning

In addition to services provided by the instructor, disabled students may need services which extend beyond the realm of the health occupations classroom. It is therefore important that the teacher involve other members of the staff such as counselors, special education and academic teachers. It may also be necessary to arrange for services which can be provided by persons outside the school system such as Vocational Rehabilitation Counselors, other human service agency personnel, and especially employers. When working cooperatively with other professionals, you will probably find that it will be helpful to schedule formal (though not necessarily lengthy) planning, coordination and follow-up sessions. You may, as a group, also have to use record keeping procedures which are understandable and accessible to all the professionals involved.

Resistance To Change

As you become more deeply involved in meeting the needs of students who have cognitive, affective, or psychomotor problems, you will probably encounter resistance in both overt and covert forms. Under the assumption that "forewarned is forearmed," I would like to share with you some of the possible defensive tactics often used to prevent change in the status quo.

1) *"We don't have the money."* Of course they do. Most institutional budgets run into the millions of dollars. What that

person is really saying is that your request has less merit than every other purpose for which those millions are being used, and he or she isn't going to rock the boat by moving funds from anywhere else to deal with your request.

2) *"They can't do it."* Who is talking about "they." Stick to individuals who can demonstrate skill and achievement. "They" can't do anything. Only specific persons can.

3) *"We don't have the staff (or staff positions) needed."* This is a variation on the money argument. Of course there are staff, and staff positions. Many organizations have dozens if not hundreds. What is really being said is that the tasks you are seeking assistance to accomplish are more irrelevant and worthless than every other duty in every job description in the place. The underlying message is that reorganization of staff duties and/or staffing patterns isn't worth the effort.

4) *"It will take too much time, or take too much time away from the other students."* This argument has merit. To help you cope with the extra demands of time and effort involved, I have provided some suggestions on time management later in this book. If the person making this statement makes no effort to allot the necessary time and effort, it too could be considered an excuse to cop out.

5) *"We have to be concerned about the patients they will be working with."* True, but "they" aren't working with anybody. Individuals who have been trained in the necessary skills, and who have been suitably placed in the work force, will be working with patients. A disabled individual who can do the job is not handicapped.

6) *"Joe (or Joan) Doakes is a 'phenom.' No ordinary handicapped person could do what he/she did."* The success of someone expected to fail

always looks unusual.

7) *"We are already doing everything possible."* Get specifics. See how many disabled are currently enrolled, how many graduated, and how many are employed by the organization. Also note the job categories of these employees. If that statement is a smoke-screen, the numbers should indicate it.

8) *"I have no authority to help you."* If this is really true, why did you ask them in the first place? Go higher. If it is not true, what that person is really saying is that he or she doesn't think your request warrants disturbing the status quo in any way.

9) *"Let's set up a committee to study the situation, get the facts and report back in six months."* The person probably needs another paperweight or bookend, and your thick report will do fine. If this approach is a stall, the suggested process will be much more cumbersome and drawn-out than processes implemented to achieve goals that you know are important to this person.

As you begin to develop and implement individualized educational services for students who have cognitive, affective or psychomotor problems, remember that the student should be placed in the least restrictive educational setting. The least restrictive would be placement in a regular classroom. This type of placement may not be possible but is the most desirable.

The CAP approach attempts to provide a framework for alleviating training barriers and for the development of appropriate vocational programs in a least restrictive setting. Assessment, course modification, and teaching techniques will be illustrated.

Purpose Of The Publication

The purpose of this publication is to provide suggestions which could be used to modify health occupations programs for disabled students. These techniques can be used in many types of health occupations courses. The following sections discuss the cognitive, affective and psychomotor characteristics frequently exhibited by disabled students and strategies to compensate for or ameliorate handicaps caused by deficits in particular areas of functioning.

COGNITIVE FUNCTIONING - WHAT IS IT?

In its most general sense, cognition is "knowing." It involves perceiving, recognizing, integrating, conceiving, reasoning, judging, and remembering. The functions which comprise cognition are major elements of the basic skills required in most vocational settings: reading, writing, speaking, and calculating.

Problems in one or more aspects of the cognitive domain may stem from deficits in one or more of the skills associated with cognitive performance. For example, a person may find it difficult or impossible to perceive accurately the sensory information received from the visual mode, auditory mode, tactile mode, or kinesthetic mode. Then too, he or she may have problems integrating or processing these perceptions into a coherent pattern of meaning. Maybe the trouble occurs only with information that is visually presented. Then again, difficulty may be experienced in receiving or processing verbal input. Other people have problems only when trying to deal with sensory stimulation that hits them in several forms at once. Such could be the case when a person does well visually when in quiet surroundings but has trouble absorbing visual input in noisy surroundings.

Expression of their perceptions and ideas may also cause difficulty for some students. Some can express themselves very well verbally, but not in written form. For others, the reverse is true. Still others can do both, or neither, well.

Poor performance in other cognitive operations may present difficulties for the students. Among these are: a) memory. A person may have difficulty in either short term or long term memory. Difficulty may be in relation to recognition, recall, or both. The student's performance may be a function of his or her ability to recognize or recall facts, concepts (classes of objects or events), or procedures (tasks with psychomotor aspects). b) Generalization from one concrete situation to others similar or identical in essentials, but not necessarily in outward appearance or context. c) Instantiation - representing an abstraction by a concrete example, or giving a case in which a general rule has been applied. d) Prediction - anticipating the consequences of certain acts, whether one's own or others. e) Application - arranging conditions and carrying out. f) Evaluation - using knowledge of facts, concepts, principles and procedures in conjunction with values to select the most desirable action in a given situation.

Academic Problems

In an academic setting there are also certain examples of the above, more generic, cognitive processes which often present problems to both the teacher and the disabled student. Among these are:

a) *Difficulty in following directions.* This problem may be due to the format in which they are presented (visual, verbal, demonstration), the complexity of the directions given, their level of abstractness, or their degree of specificity, generality or ambiguity. The problem may also be due to lack of practice in analyzing directions and comprehending their implications for behavior and performance

b) *Difficulty in solving problems.* Many students are unskilled in problem analysis and resolution. Like many other skills, this one may need to be developed and practiced. A student's problem-solving style may also hinder his or her success in class. Does the student impulsively choose the first possible solution that comes to mind? Does he or she show extreme caution in solutions? Could the student be characterized as one who mulls slowly and deliberately over a problem, gathers information, and selects possible solutions only after much thought, one who, while not necessarily impulsive, may try several conventional and unconventional possible solutions after brief analysis, or one who needs very directive supervision to address and solve problems? A student's problem-solving style may cause or aggravate problems if it is incompatible with the demands of the problem and its context.

c) *Low level of reading and writing skills.*

d) *Low level of math skills.*

e) *Poor observational skills.*

f) *Overall slowness in accomplishing tasks and learning new material.*

Academic Working Conditions

In addition to skill considerations, each learner has definite preferences for certain "working conditions" and may perform fully only when working under these circumstances. For example, does the learner work best in a structured setting with clear goals, procedures, timetables, and methodology? Or does the learner chafe under such a structured setting but blossom when given a problem to solve or a project to develop? Does the learner thrive in cooperative work, or in solitary pursuits? Does the learner work best in isolation, or in the company of others (whether or not such work is done cooperatively)? Will a relatively sound-filled environment help the learner maintain a higher level of concentration or prove distracting?

Feedback

In addition to "working conditions," learners respond differently to different types of feedback; and various methods of feedback will have different effects on a given learner under different circumstances. Some of the forms in which feedback can be expressed include the following:

1) "go-no go" feedback. Examples would be "start," "stop,"

"continue," "yes, that's it," "no, that's not it."

2) recognition, which can include verbal praise, public aknowledgement, or awards.

3) tangible benefits such as a high quality finished product, money, time off, promotions, and so forth.

4) corrective feedback such as "try another way," "try this," "move (manipulate, turn, adjust, open, etc.) that," and similar directional and performance feedback.

While it is safe to say that most learners would respond to some degree when provided with any type of feedback, students with learning problems may respond best only to a carefully selected approach to feedback. (If a supposedly good method of feedback seems to be ineffective with a certain student, it can't be considered appropriate. If a student responds well, it is safe to conclude that the type of feedback used has had a desirable influence.)

The value of continuous monitoring of a student's progress coupled with timely and precise feedback cannot be overstated. A person who has learning problems doesn't operate well in a feedback vacuum.

AFFECTIVE FUNCTIONING

The affective domain is made up of emotions, traits, reactions, attitudes, values, and moral judgments. Attitudes, values, appreciations and morals are internal feelings which influence most outward behavior. Affective influences are very important because, while cognitive and psychomotor factors provide indicators of what a person can do, one's affective functioning influences what a person will do.

A person with affective problems can be described as a person in pain. To cope with this emotional hurt the person in pain will exert great effort. Some efforts are functional and productive, others lead to temporary relief, and often result in even greater emotional turmoil.

Low self-esteem, anxiety, alienation, low self confidence and expectations, extreme shyness and withdrawal, fear, rage, depression, low levels of internalized control of one's own behavior, and abuse of chemicals are commonly used labels to express the "symptoms" of psychic pain. Any of these symptoms may appear in someone as a response to extreme pressure, but if their intensity is strong over a long period of time, they should be considered serious. Serious emotional dysfunction is a multi-faceted phenomenon in which the troubled person functions poorly, experiences great personal discomfort, and exhibits unusual patterns of appearance, behavior and communication (both cognitive and emotional). These unusual patterns might include inadequate or absent affect and functioning; bizzare appearance, behavior or communications; or extreme exaggerations in regard to appearance, behavior or communication.

In an instructional setting you can expect to find students who are experiencing the normal emotional traumas of daily life (anxiety or depression, for example) which influence their performance. Most of the time you would have no need to intervene. At times, though, you will find that a person may have a more serious problem with anxiety, depression, abuse of alcohol or other drugs, or other emotionally-based difficulties. In these situations, you may have to consider more direct action.

PSYCHOMOTOR FUNCTIONING

Deficits in psychomotor functioning may stem from brain injury, spinal cord trauma, other nerve problems, musculo-skeletal dysfunction, or impaired functioning of organs such as the eyes, ears, heart, lungs, kidneys, and blood to mention a few.

We are not going to analyze each problem as a set of symptoms which must be tested, diagnosed, arrested or stabilized. We are going to address learning problems which stem from psychomotor impairments which have already been stabilized and are expected to be permanent.

Major problems caused by psychomotor dysfunction which must be considered in an instructional setting include mobility, strength, endurance, manipulation, and communication (especially with students who are blind or deaf).

HOW CAN YOU DETERMINE WHO MIGHT BE EXPERIENCING COGNITIVE, AFFECTIVE, OR PSYCHOMOTOR PROBLEMS

Traditionally, an instructor waited until a student's clinical or academic performance clearly portrayed the existence of problems. At this stage, though, corrective action became difficult because the student had been developing a history of poor performance (and all the negative self-opinions which can accompany poor performance), and much of the student's time (and maybe the instructor's as well) was spent unproductively. Frequently, the student having problems would drop out or be dropped. So what, you say. A health professional is dealing with the lives of patients, and sloppy, haphazard, inept performance cannot be tolerated. Correct. But we must remember that learning to do something and performing it once it has been mastered are not just two ways of stating the same process. Most of us learn quite rapidly under many if not all conditions, so we view "learning" and "performing" as one and the same thing. (Really now, did you always do it right the first time you tried, every time you were learning something new?) Learning, however, is not identical with performance. Some fast learners, for reasons other than skill alone, do not always perform well. Others, who may have to struggle fiercely, become steady, competent performers once they have mastered the required tasks.

The implications of this distinction between "learning" and "performing" are several. Foremost among them is the proposition that if instructional strategies are systematically tailored to the learning strengths of a student and designed to help overcome, minimize, or compensate for his or her learning deficits, the student involved will have a much greater chance of developing into a competent, qualified performer than he or she would if exposed to learning tasks in a haphazard or rigidly uniform manner.

If you choose to present instructional sequences geared to the learning requirements of individual students, you will probably want to get some idea of who is likely to experience difficulties, and the areas in which these difficulties might occur. If you wait until a series of exams or clinical performance reviews indicate problem areas, you will find that the student will have a difficult if not impossible time regrouping. You will also find that you will have difficulty adjusting your curriculum and instructional strategies in midstream.

If you would like to avoid this situation, but are not sure how to go about it, the following discussion could prove helpful.

Assessment For Decision-Making

There is no need to analyze people's performance and collect evaluations data if you don't plan to use this information when making decisions. If you choose to acquire assessment data, your goals should be to: a) determine who is likely to have problems in your instructional area; b) determine as closely as possible the specific type of problems likely to arise; and c) begin to point out avenues of remediation, amelioration, or compensation for those problems.

A framework for this information gathering can be provided by a chart such as the following (Figure two).

You might want to complete a chart like this for each student in your class, or you might want to make one only for students experiencing difficulty as the course progresses.

If you decide to use this technique, here's how:

1) Check the list headed "Student Abilities" and delete those not applicable to your course. You may also want to add other abilities necessary in your course.
2) Write a list of class activities. For example:
    a. listen to a lecture on sterilizing instruments,
    b. read text (written at the 12th grade reading level), or
    c. complete exercises (specify each).
3) Make a circle in boxes where activities require certain abilities. For example, to learn from reading the text, the student

FIGURE TWO

			CLASS AND CLINICAL ACTIVITIES																														HOW TO HELP	
	STUDENT ABILITIES	HOW TO ASSESS																															STUDENT ACTIVITY	TEACHER ACTIVITY
Cognitive	READ																																	
	WRITE																																	
	LISTEN																																	
	SPEAK																																	
	COMPUTE																																	
	MEMORIZE/RETAIN																																	
	ANALYZE																																	
	SYNTHESIZE																																	
	REASON/JUDGE																																	
	UNDERSTAND DIAGRAMS																																	
Affective	SELF CONF./SECURITY																																	
	PEER RELATIONS																																	
	SUPERVISION																																	
	FRUSTRATION																																	
	COPING/ANXIETY LEVEL																																	
	APPEARANCE																																	
Psychomotor	MOBILITY																																	
	LARGE MUSCLES																																	
	SMALL MUSCLES																																	
	VISION																																	
	HEARING																																	
	COORDINATION																																	
	TOUCH																																	

must be able to read effectively and possess adequate vision.

4) Decide how to assess student abilities in each area marked by a circle. In most classes, all abilities will be required by one or more class activities. Assessment might be made by pre-testing students, by obtaining information from counselors or earlier educational records, by observation, by asking the student, and so on. Jot a note in each category under the "How to Assess" column to indicate how needed information will be gained.

5) Make a copy of the form as it is filled out to this point for each student on whom you wish to keep records, and label it with his or her name. Assemble assessment data for each of these students.

6) Put a "+" in the circles where the student's abilities seem to be adequate for success in the class activity. Put a "ı" where the student's abilities do not seem to be adequate for him or her to successfully complete a class activity. (We don't suggest a "-" because of the negative connotations associated with it. A "ı" can just as easily be changed to a "+" when the student's performance becomes acceptable.)

For instance, in the above example the student was required to read a 12th-grade-level text book as one class activity. A circle would have been made in both the "Read" and "Vision" Student Abilities categories. If the student reads at the 9th-grade level, the box where "Vision" and "Read text..." intersected would look like this: ⊕, while the box where "Read" and "Read text..." intersected would show this ⦶.

Sometimes, a student's problems might cause him or her difficulty in completing a task, even though the ability in question is not usually thought of in relation to that task. For example, a student who exhibits pronounced insecurity about his or her ability to succeed in school might react negatively to the reading assignment. In such a case, you would put a "0" in the "Self Image"--"Read text..." box, even though no circle indicates this is a normally required ability for the task.

7) Each "ı" on your chart indicates that a problem exists. You might take steps to alleviate a problem by referring the student for counseling; by encouraging him or her to use tutorial services or an independent study laboratory; or by modifying your presentation mode or expectations for the student. In the "How to Help" category note briefly your plan to help the student attain success in your class. To continue with our earlier example of the student with the low reading level, you might decide to ask a proficient reader in your class to tape record the relevant text book passages. You might also suggest that the student get tutorial help in reading. Your "How to Help - Teacher Activity" column might then read "tape/tutor." The student activity section of the "How to Help" column might indicate how often the tape/tutor would be used and with what material. It could also indicate an activity different from, but compatible with activities listed in the "teacher activity" portion.

As mentioned, the information needed can be sought formally or informally. Formal sources include psychometric tests, clinical assessment by relevant experts, survey instruments, or other assessment tools such as a formal behavioral assessment of the student's performance conducted by trained observers in an applied setting. Informal sources of information include fellow instructors, other professionals such as psychologists or school counselors, and the student him or herself. Unfortunately, the information you need for planning and decision-making may be nonexistant or incomprehensible to you. If this is the case, you may wish to conduct an informal assessment of your students at the start of the semester.

This assessment does not have to be lengthy or difficult. The method described here would take about two hours, and could yield results which would save much more time and effort later. The techniques are not refined, nor are the results definitive. However, this plan can give you a good start on identifying which students are likely to have problems, and which class activities may present difficulties to specific students.

I. *Plan of Action*

To determine specific abilities and disabilities of individual students:

Round One:

5 minutes	Explain to the students that the assessment program will be brief, that it is your tool to determine how best to meet their needs, and that it will not affect their grades in any way. Ask the students to spend 15 minutes writing an essay on "What I Expect to Learn from this Class" or "How this Class Relates to my Carreer Goal" or some similar topic.
15 minutes	Students write essays.
10 minutes	Give a lecture on some specific class topic which is unrelated to the class plans for the following five days. Use no visual aids.
10 minutes	Read ten questions to the students, based on your lecture material. They should require short (one letter or one word) answers.
15 minutes	Have the students read a technical passage in your textbook, unrelated to the class activities planned for the next five days.
10 minutes	Ask students to answer a written ten-question multiple-choice test on the assigned reading material.
10 minutes	Demonstrate a task related to your class topic.
10 minutes	Have the students perform the task you demonstrated.
Round Two:	three to five days later.
10 minutes	Read the students ten questions similar (but not

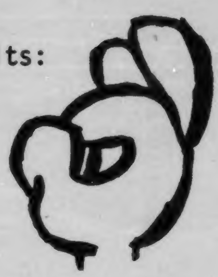
identical) to those of Round One, dealing with the same lecture material. Students again answer with one-letter or one-word responses.

10 minutes Students answer a second written ten-question multiple-choice test on the Round One reading assignment.

10 minutes Students again perform the task demonstrated in Round One.

II. *General Outcomes*

You will want to look at the following assessment results:



A. *Essay*
  - overall quality
  - specificity of course or career goals
  - realism of expectations for the class

B. *Comparison of discreet lecture, reading, and demonstration tasks*
  - overall quality
  - differences in abilities shown for each teacher input/student output mode
  - differences in quality of short-term versus long-term memory, as indicated by comparing Round One test results with those obtained in Round Two:
    - overall
    - by input/output mode

III. *Essay Results*

A. *An essay from a student who is learning disabled might show:*
  - letter or number reversals, e.g., stuby for study; 1799 for 1979
  - misspelling of simple words, e.g., prak for park; hapy for happy
  - other words spelled phonetically, e.g., telafone for telephone
  - omission of words
  - incomplete or run-on sentences
  - terrible penmanship, or writing which does not stay on the

lines of ruled paper
- lack of organization, e.g., no paragraphs
- a messy looking paper, with many words crossed out and many erasures
- thoughts of insecurity or self-doubt about his or her ability to succeed in school

BUT

- adequate vocabulary
- reasonable expectations of the class
- clear train of thought

B. *An essay from a slow student might show:*
- misspelling of longer words; phonetic spellings
- missing punctuation
- lack of organization
- simple vocabulary
- short sentences
- unrealistic expectations of class
- insecurity or self-doubt about his or her ability to succeed in class
- a relatively short essay, compared to those of other students
- concrete thought, with abstract concepts seldom expressed

C. *An essay from a student with emotional problems might show:*
- overinclusion of inappropriate ideas into a concept
- idiosyncratic meanings of common words; 'new' syntax or 'new' words
- fragmentation of thoughts
- lack of organization; incoherent sentences or paragraphs
- interpenetration of inner fantasies and outer realities
- naming a whole by an unusual part, e.g., it is not unusual to refer to a king or queen by saying "the crown..."; it would be unusual to refer to a monarch by saying "the robe..."
- unrealistic expectations of the class; possibly very grandiose plans for the future or expectations that the class will remedy

all the person's problems
- extreme self-doubt or self-confidence
- strong negative feelings about or fears of other class members, teacher or aides

Also note extreme reactions while writing the essay, such as:

- loud complaints about the assignment
- excessive anxiety
- excessive suspicion of the teacher's motive in making the assignment
- inappropriate mannerisms
- refusal to do the assignment
- excessive need to explain in person why the assignment was not done, or was done in a certain way

IV. *Assessment of Tasks*

Comparing the results of the three discreet types of tasks (listening, reading, and performing) could help you identify students' specific learning assets and deficits.

A. *A learning disabled student might show:*
- much better performance with one type of instruction than another
- verbal or demonstrated understanding of the work which is much greater than that indicated on written tests.

B. *A mildly retarded student might show:*
- low over-all functioning
- mistakes in understanding directions
- that more time was needed for completion of the test or task than other students
- retest results much lower than immediate results

C. *An emotionally troubled student might react with:*
- one or more tests not attempted, or giving up before time is

called

- extreme hostility or resentment to the assessment situation
- excessive need for teacher reassurance during or after the assessment situation
- marked withdrawal, anxiety, or depression during or immediately after the test

D. *Students with undetected hearing or vision problems might:*

- show wide differences in functioning on the discreet tests
- show evidence of straining to see or hear
- comment that it was hard to see or hear the material

V. *Psychomotor Difficulties*

A. *As much as is possible, include known physically, visually, or hearing handicapped students in the assessment process. This will give you a good idea of the student's abilities and of the changes that will be necessary for him or her to succeed. For example, if you have a hearing impaired student in your class who has an interpreter assigned to him or her, let the interpreter sign your lecture and test questions. If not, let the student lip-read your lecture and questions. (This may be very frustrating for the student, but it will give you a good idea of how important visual cues are to this learner.) Since these assessment results will not be reflected in the student's grade, the more accurately they reflect the student's normal classroom situation, the more useful the results will be when you begin to develop appropriate instructional strategies.*

B. *The effects of movement-related barriers may also show up during the assessment process or during initial class periods. These include:*

- acceleration and deceleration changes
- time pressures
- long walking distances
- waiting in a standing position

- sitting down and/or getting up
- moving in crowds
- carrying things
- reaching and handling

C. *Students with psychomotor handicaps may also evidence fears:*
- of getting lost
- of danger to personal safety
- of embarrassment at inept behaviors.

The following are sample essays which illustrate many of the points mentioned above.

SAMPLE ESSAY ONE

Deastreachor

I want to work in a hospitl
cause my dder brother and
sister were there. They
enjoyed working there and the
nurses a doctors were nice
to them. Can you help me get
in a hospitl job.

Joe

SAMPLE ESSAY TWO

EUROPE CAN'T STAND THIS CULTURAL REVERSE THINKING Oct. 10, 197
WHEN ARE WE GOING TO GET STRAIGHT ON NEW YORK CITY PLANNING
BREAK DOWN! IS THE PANAMA CANAL TREATY REJECTION STRATEGIC?

STUDENT SENATE U.S.A.
UNIVERSITY OF THE WORLD
THE "MALLS IN STREETS"
IN CENTERCITY (THE CAPITAL
CONCOURSE STATE STREET
PROJECT) HAS NOW BEEN
LINKED LOCK STOCK AND
BARREL
TO THE PANAMA CANAL
TREATY
BOTH OUT OF THE SAME
BIAS AGAINST MOTION BAG

THESE AREN'T THE ONLY
EVIDENCES EMINATING
FROM THE TURN AROUND
THINKING OF TELEVISION
PSYCHOLOGY.

WHAT MAKES CENTER CITY'S SITUATIONS SO UNTENABLE IS IT BEING A UNIVERSITY COMMUNITY AND THE NOW SEEN STRANGE PROMOTION PENCHANT IN THE AREA OF SEX i.e. SEX-ART AS OPPOSED TO ART-SEX. IN OTHER WORDS, PROMOTION OF PEOPLE IS HOW CENTER CITY WILL BE LOOKED AT BY STUDENTS A HAVEN FOR THE PROMOTION PENCHANT. TOGETHER PROCESS CONTENT ARCHITECTURE AND STUDENTS HAVE A WAY THROUGH THE COURTS OF MAKING THINGS RIGHT.

SAMPLE ESSAY THREE

Medical Records Technician

4 years ago I worked in the business office of an area Nursing Home. My primary job, after the pressure from Lt. Gov Schrieber came down on the nursing home about the misuse and abuse of the medical records of patients in the nursing home, was to ~~clean up all~~ organize the records of the deceased patients, the current patients and the patients who left the nursing home.

The Organizing was nearly impossible. There were missing medication records, admission sheets, discharge sheets in the records of nearly 70% of the entire Collection. Information was missing and some records were missing entirely.

My interest in becoming a Medical Records Technician lies primarily in the fact that abuse and misuse Comes from unqualified people handeling these records. I was not experienced in any way when I was given full responsibility for the records at the Nursing Home, and found the people before me were as equally qualified. Also I could not allow to let family members, the patient or relatives review the record. Only RN's, doctors and the unit leaders were allowed to view the records.

Systems were tried and failed when procedure was set up to insure the safety of the records between the floors and the business office in the nursing home.

Through the fault of doctors not signing ~~reports~~ charts on time, thru the fault of nurses misplacing and losing valuable papers for the chart & thru the fault of unit leaders delaying the charts to be __Closed__ down in the business office & thru the fault of unqualified ~~ted~~ record technicians, I feel it important to gain as much knowledge and legal knowledge about medical records as possible.

It could mean a matter between keeping a nursing home open to help or closed because of ignorance.

SAMPLE ESSAY FOUR

I an intoresleb in beimd
a nursing asistamt becose the
helth feilbs has many carers
for qeople to lern and ~~geo~~ ~~g~~ grow
into. I also feel that my
adility to work with otuu
in a cherfue Frienbly way
wold help me to de a god murse
asistent anb pet alone with
murses and batiens both.

Sara Snyder

A person's specific learning problems may become relatively apparent to you using this procedure. However, some of the more serious emotional dysfunctions may not be so apparent, or may develop only later.

The indicators of emotional problems are fluid and many-faceted. For this reason, intensity and duration of the symptoms are given strong consideration. If an indicator is manifested very strongly over a long period of time, the likelihood of that person developing, or having, serious emotional problems is much greater than a person who manifests a less intense symptom which is transient and which may be a perfectly normal response to a specific event or problem. With the above considerations in mind, the following are offered as possible indicators that the person exhibiting them may be developing difficulties.

1) frequent, extensive expressions, verbal or otherwise, of a "boxed in" or "trapped" feeling. This is one of the first indicators that "things may go wrong" if the person's present life activities continue unchanged;

2) marked changes in personality (frugal to extravagant, outgoing to sullen, etc.);

3) crying jags that have no rational explanation;

4) a loss of self-confidence or self-reliance, and lowered self-esteem;

5) a constant feeling of being watched;

6) difficulty in controlling one's thoughts;

7) severe and prolonged depression;

8) growing edginess, tension, and unexplainable fears;

9) a sharp slump in academic or job performance;

10) increasing withdrawal from people;

11) growing excesses such as hypercleanliness, food faddism, or religious fanaticism;

12) hearing voices;

13) abrupt and unexplainable changes of plans or job;

14) regular headaches and insomnia;

15) indications of suicidal intent, for example, talking about being dead, ending it all, or killing one's self, or giving away valued possessions.

Even in combination, the appearance of these symptoms may not be indicative of serious emotional disturbance. Many people, if not most, will develop such symptoms under stress. The crucial issue is whether or not the person can "turn them off" or take effective measures to alleviate them.

A very common emotional problem is depression. Feeling depressed is a normal and natural response to experiences of loss, failure, and bad luck. For some persons, depression becomes something more than just normal feelings of the blues. Sometimes a serious depression can begin ordinarily enough with an event like the loss of a loved one or a change of job. But the serious depression persists and becomes worse. (Researchers are still unsure whether or not serious depression is an aggravated form of normal depression or whether it is something entirely different.)

Depression can show itself in many ways and with different degrees of intensity. The key feature in depression, however, is change. The person becomes different. Instead of seeking gratification and pleasure, depressed persons avoid it. Instead of taking care of themselves, depressed persons neglect themselves and their appearance. Their drive to survive gives way to suicidal wishes. Their drive to succeed and achieve turns into passive withdrawal. In general, the most obvious and typical sign of serious depression is a gloomy mood of sadness, loneliness, and apathy. However, if periods of deep depression seem to alternate with periods of extreme elation, this too points to serious depression.

The seriously depressed persons see themselves in a very negative way. They are convinced that they are alone and the situation is hopeless. They often blame themselves harshly for trivial faults and shortcomings and exaggerate the seriousness of these shortcomings. They are very pessimistic about themselves, about the world, and about their future. Their personal outlook is pervaded by portents of doom, against which they are *helpless* and *impotent*, and for which the prospects of resolution are *hopeless*.

Depressed persons also become less interested in what is going on around them, and no longer derive pleasure from activities they formerly enjoyed. Fatigue, sleep disturbances, and especially early morning insomnia are quite common. Because of the extreme feelings of fatigue, some depressed persons may want to sleep a lot more than usual. Some may lose the desire to eat, and thus lose weight. Others may begin to overeat and thus gain weight. Persistent crying spells are also evidenced by some who are depressed.

For some people, depression may take the form of *agitation* and *alienated rage*. It may mask itself as physical discomfort, or it may contribute to the abuse of alcohol or other chemicals. Habitual underachievement may be an unrecognized form of depression.

Depressed persons share the common feeling that they have lost something very important to them though often this is not the case. From a feeling of loss, depressed persons may progress to unrealistic convictions that they are losers and will *always be losers*, and must be worthless, "bad," and perhaps not worthy to be alive. Some may even try to kill themselves.

So many seriously depressed people do attempt suicide that serious depression may be considered the only "fatal" emotional disturbance. Not all who are seriously depressed will attempt suicide, nor are all who attempt suicide necessarily suffering from serious depression. It is estimated, though, that up to 75% of those who attempt suicide are seriously depressed. Other studies indicate that the person hospitalized for depression at some time in his life is about 36 times more likely to commit suicide than the nondepressed person, with the greatest risk during the recovery process or immediately following treatment.

What are some of the signs that a person may harbor suicidal tendencies? First and foremost is the suicidal threat. Any threat, however blatant or subtle, must be taken seriously. Not everyone who threatens to commit suicide actually attempts it, but nearly all who do attempt it either make an open threat or give significant clues to their intended action. Other clues include the following:

a change in mood or behavior. This may be obvious in that the person becomes extremely depressed, or less obvious, such as when a very depressed person suddenly becomes serene. (Maybe the person resolved the situation positively. On the other hand, the person may have made a decision to die, and feels relieved that he or she has at last found a way to end the misery and quell the inner disturbance.) Insomnia or other serious disturbances in the sleep pattern may also be indicators of a serious change in mood.

giving away prized possessions. Especially when accompanied by remarks such as "I won't be needing it any more," or similar statements.

excessive use of chemicals (alcohol, other drugs). Depression and suicide are often associated with serious alcohol abuse.

a pre-occupation with one's health. Along with a loss of energy and a diminished interest in hobbies, sports or other pursuits that were previously important to the person.

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the study of suicide techniques.

Though these clues seem straightforward and obvious enough, in reality they can be easily overlooked. We do not like to think that anyone we know, love, or work with would kill themselves, so we tend to discount the seriousness of subtle hints. Thus we must be alert to the messages communicated by people around us, and remember that people often communicate the most critical messages in indirect, non-obvious ways.

Though a person experiencing such intense psychic pain that he or she considers suicide is in need of appropriate professional attention, a more insidious and stealthy killer can be found in a large percentage of our population. That killer is stress. Stress can cause or contribute significantly to problems such as ulcers, high blood pressure, and a lowered resistance to diseases. Stress can also increase the dangers of harsh environmental chemicals, poor eating habits, or other unhealthy practices.

When someone is under stress, adrenalin enters the bloodstream. This triggers an increase in blood pressure, heart rate, breathing, blood flow to the muscles and metabolism. Years ago, a physical response, "flight or fight" was usually the way to eliminate this stressful situation. Thus a person's stress reactions were very helpful. Now, however, the sources of a person's stress may be less tangible, and even self imposed: arguments, deadlines, boredom, ambition, lack of exercise, pressure to achieve. Stress is also commonly caused by changes (both pleasant and unpleasant) which are too frequent or too extreme for the person to cope with. Such changes include: personal loss due to death of a loved one, loss of friends due to moving away or divorce, illness and/or injury, job changes (losing a job, getting a new job, being transferred, receiving a promotion), financial reverses, or a large accumulation of debt, family changes (new child, leaving for school); or retirement.

Signs of stress can include physical agitation, sweaty palms, rapid breathing, tense muscles, a "tight stomach," and rapid speech. A person under extreme stress can also become anxious, lethargic, or withdrawn. He or she could develop psychosomatic complaints or other coping mechanisms. Frequently a person resorts to drugs, such as tranquilizers or alcohol. For many people, fear of losing love is one of the biggest causes of stress. This fear is frequently accompanied by a fear of failure (whether failure to please others, failure in school, or failure at work). These fears often go together because many people feel that if they don't succeed according to the standards set by themselves or by those important to them, they will lose the love of their spouse or parents and lose status in the community.

In school settings, many students are trying to live up to unrealistic expectations which originate in themselves or in those whose approval they seek and are thus under extreme pressure to succeed.

Another emotionally based problem which is likely to appear in a health occupations setting is chemical abuse. A person developing or in the midst of a problem with chemicals reflects this both in how he interacts with others and in how he makes excuses to himself about what he is doing. Warning signs of a problem with alcohol include the following:

1) the drinker is difficult to get along with when he or she is drinking, but not when sober;
2) the person drinks "because he or she is depressed";
3) the person drinks to "calm his or her nerves";
4) the individual periodically drinks till he or she is "dead drunk";
5) after sobering up, the person cannot remember part or all of the drinking episode he just experienced; (this is a "blackout." It is alcohol-induced amnesia. The person may not remember events he or she was participating in, or may not recall how or when he or she got home);
6) the individual hides liquor in order to insure an uninterrupted supply;

7) the individual lies about both how often and how much he or she drinks;

8) the individual neglects to eat when drinking;

9) the individual neglects his or her family when drinking;

10) the individual is preoccupied with drinking; he or she thinks about, talks about, or plans for drinking at times when other matters should be considered;

11) the individual can drink considerably more than most other people and remain remarkably efficient mentally and physically;

12) the individual drinks to "get high"; he or she gulps drinks;

13) the individual drinks alone; the person may drink alone in a bar to try to fool him or herself into believing he or she is drinking socially, but the aloneness is as much psychological as physical; the person often withdraws into a fantasy world of success, power, and prestige;

14) the person experiences "loss of control"; the person drinks more than he or she planned, or starts drinking without even thinking about it. He or she may stop after work for "one drink" and end up staying until closing time.

In an educational or employment situation, a person who has a chemical abuse problem often manifests it in his or her performance. Examples of this include:

1) Excessive absenteeism-especially on Mondays, Fridays, days before and after holidays, days after payday.

2) Sudden unexcused absences.

3) Frequent absences for colds, flu, bronchitis, sore throats, accidents, and "family problems."

4) Wage garnishments or other legal involvement.

5) Fights on the job or in class (verbal or physical).

6) Deteriorating personal appearance.

7) Odor of alcohol on the breath (often accompanied by the smell of breath fresheners, strong perfume, or other devices to mask it).

8) "Drinking lunch" and prolonged lunch hours.

9) Frequent disappearances during morning and afternoon breaks with obvious after effects.

10) Worse judgment than previously.

11) Increasing quantity of unacceptable or substandard work.

12) Increasing complaints from co-workers, fellow students, or customers.

13) Tardiness and early departures.

While the above indicators point to the presence of a problem, you cannot automatically assume it is a chemical abuse problem (although one half of such performance problems are rooted in chemical abuse).

If someone isn't a user of illegal, or illegally obtained, chemicals, he or she could still develop problems. Legally acquired prescription drugs, especially tranquilizers and anti-depressants, can be the source of great personal and interpersonal turmoil. How could you tell if you might be heading for trouble in this way? You may be heading for trouble (or already there) if you:

1) need pills to function in the morning, and more pills to sleep at night;

2) shop around from doctor to doctor to get what you feel you need for your nerves, headaches, back pains or whatever;

3) need more of these drugs than previously to get any relief;

4) develop personal, family, financial, or employment problems due

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to your use of these drugs;

5) are losing interest in other people and narrowing your range of social and recreational activities;

6) have stopped participating in or performing hobbies, club activities, or organization activities that you enjoy;

7) need a daily intake of chemicals to alleviate your psychic pain and overcome unpleasant feelings.

Determining Psychomotor Problems

The best way to determine whether or not a psychomotor dysfunction will cause an instructional or performance problem is to let the person try. During these trials, you will play a supportive role, and observe whether or not the student can operate comfortably and effectively, what areas need alteration, and what alterations might be effective. Note also the students' related emotional responses (fear, embarrassment, confidence, or whatever). A work sheet such as the following might help you organize your observations more effectively.

FUNCTIONAL CAPACITIES CHECKLIST

SEEING

able to: perform required reading? ____________
able to: read blackboard? ____________
able to: see demonstrations? ____________
able to: view films? ____________
able to: view pictures? ____________
able to: travel through building? ____________
able to: draw own diagrams? ____________

Special adjustments required:

....Lighting ____________
....Lenses ____________
....Readers ____________
....Guides ____________
....Oral instruction ____________
....Talking book ____________
....Braille ____________
....Large typewriter ____________
....Heavy dark pencil ____________
....Special orientation to building & classes ____________
....Seating ____________
....Other adjustments: ____________
____

COMMUNICATION

Hearing

In a large classroom? ____________
Normal range of radio or tape recorder? ____________
Interference from normal traffic noises and other extraneous sounds? ____________
Functional use of hearing aid? ____________
Attitude toward hearing aid? ____________
Lip reading? ____________

Special adjustments required:

....Seat in front of room ____________
....Louder presentation by instructor ____________
....More careful articulation by instructor ____________
....More board illustrations & written materials ____________
....Special hearing devices ____________
....Use of an interpreter ____________
....Other adjustments: ____________

Speaking Ability

Adequate for classroom use?
Adequate for special courses?
Adequate for occupational choice?
Use of speechboard.

Writing

Capable of writing classroom notes?
Resources for dictating notes.
Knowledge of typing.
Capable of writing on blackboard?
Special adjustments required:

Manual Communication

Types Used:
....Total Communication
....American Sign Language (ASL)
....Signed English
....Fingerspelling only
....Other:

Language

Can the student communicate adequately in the classroom:
....Through spoken language?
....Through written notes?
....Through manual communication?

MANIPULATION IN CLASS

Self-care in building?
Handle laboratory equipment safely?
Write using pen and pencil?
Handle chalk in classroom?
Eat by self-feeding?
Carry own books?
Turn pages?
Handle coins?
Steady hand movements?
Speedy hand movements?
Two-handed coordinated movements?
Pick up large objects?
Pick up small objects?
Open doors?
Typing Skills?
Raise hand for instructor's attention?
Manipulate papers?

MANIPULATION AS REQUIRED BY THE PROSPECTIVE JOB SETTING

lifting (how much, how often)
carrying (how much, how often)
pushing
pulling
climbing
balancing
stooping
kneeling
crouching
crawling
reaching
handling (gross motor skills)
fingering (fine motor skills)
feeling
standing
walking
sitting
turning

MOBILITY

Travel to and from school
Travel on level surfaces
Special devices used
Walking up and down steps
Relative speed of mobility
Steadiness and balance
Assistance required
Ability to sit in and rise from chair
Ability to walk up incline
Ability to walk on hard smooth surface
Ability to pass through narrow aisles & doorways

Special aids required:

....Special elevator service
....Early dismissal
....Student helper
....Paid attendant
....Close safety supervision
....Others:

SPECIAL HEALTH PROBLEMS

Description of condition:
Special medication & health care required
Activity limitations
Possible curriculum limitations
Progressive or stable
Special adjustments needed:

PRESCRIBING FOR STUDENTS WITH COGNITIVE PROBLEMS

If the data you have gathered indicate that certain of your students have difficulties that seem to be cognitively based, you still may be uncertain about how to remedy or (more likely) compensate for the problems.

A general strategy would follow a process similar to this one:

1) Briefly describe the problem (or note it in chart similar to the one provided in the "assessment" section of this book).
2) Identify as much supplementary information as you can which relates to the identified problem.
3) Set goals in conjunction with the student. Include long range employment goals as well as more short term training-learning objectives.
4) Identify the skills to be learned.
5) Utilize in-school sources of assistance (and outside agencies when feasible) to develop prescriptions for academic, vocational, and "independent living" skill development.
6) Outline instructional methods to be used, the order and speed of presentation, and contingency plans to cope with difficulties.
7) Note specific tasks and procedures the student can use to improve his or her learning.
8) Determine instructional materials to be developed or modified. Include both instructional materials you use and instructional materials the student will use.
9) Examine the methods you use to evaluate student progress, and modify them as needed to insure that the student is assessed fairly.

In more specific terms, I will now suggest some approaches which you may choose to try when specific problems arise.

Learns Slowly and Poorly

In general, it is imperative to remember that when you are working with a student who is a slow, inefficient learner you cannot confuse *training* with *presentation* "or exposure." Training consists of systematic, controlled procedures which are carried out so that educational effects can be measured and recorded. "Exposure" occurs when you make available information which you hope the learners will study and assimilate appropriately.

A specific strategy for the slow, inefficient learner could consist of the following steps:

1) measuring the learner's current behavior and skill level;
2) specifying the skills to be learned;
3) requiring active responses from the student (in contrast to hoping he or she will soak up information presented, assimilate it, and apply it correctly in appropriate circumstances);
4) arranging small sequential steps in order to maximize opportunities for success;
5) building in review points to help maintain skills learned previously;
6) shaping generalization and differential discrimination skills;
7) measuring progress in a systematic and precise fashion.

To implement such a format, you will probably have to utilize task analysis procedures, develop training materials and methods, provide feedback in a controlled way, and measure progress systematically.

As a supplement to this section you might wish to read and/or review the following works:

Bechtol, W. M. *Individualizing instruction and keeping your sanity*. Chicago: Follett Publishing Co., 1973.

Charles, C. M. *Individualizing instruction*. St. Louis: C. V. Mosby Co., 1976.

Gropper, G. L. *Diagnosis and revision in the development of instructional materials*. Englewood Cliffs, New Jersey: Educational Technology Publications, 1975.

Mager, R. *Goal analysis*. Belmont, California: Fearon, 1972.

Mager, R. F. *Measuring instructional intent*. Belmont, California: Fearon, 1973.

Mager, R. F. *Preparing instructional objectives*. Belmont, California: Fearon, 1962.

Mager, R. F. and Beach, K. M. *Developing vocational instruction*. Belmont, California: Fearon, 1967.

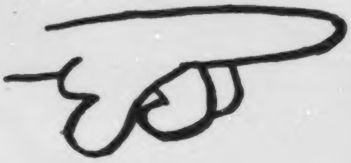
Mager, R. F. and Pipe, P. *Analyzing performance problems*. Belmont, California: Fearon, 1970.

Rosenberg, M. B. *Diagnostic teaching*. Seattle: Special Child Publications, 1968.

In conducting a task analysis and utilizing it in your training procedures, it is very important to be aware of the *implicit assumptions* you are holding in regard to the current skill level of the student. For example, the following task analysis contains several implicit assumptions about the skills possessed by the trainee.

NURSING ASSISTANCE OCCUPATION TASK:
MAKING AN OCCUPIED BED

Task Component To Be Performed	*Implied Assumptions*
1. Wash hands.	a. knows where sink facilities are or knows whom to ask for directions.
2. Collect necessary supplies and stack linen in order.	a. knows where linen supply closet or cart is. b. knows whether to bring linens to patient room on cart or remove what is needed and leave cart where is. c. knows the "order" in which to stack the linens for use.
3. Provide for patient's privacy.	a. understands why privacy must be provided. b. understands what "provide

Task Components To Be Performed	*Implied Assumptions*
	privacy" means, (put up screen, shut door, draw curtain, etc.)
4. Describe procedure to patient.	a. understands why it is necessary to inform patient of procedure. b. knows how to describe procedure and use proper tact/tone of voice.
5. Position bed in high, flat position, if allowed.	a. knows how to determine whether or not flat position is allowable, or knows who to ask. b. understands how to use bed raising/lowering mechanism and how to manipulate various bed positions, using buttons or crank.
6. Put side rail up.	a. knows what side rails are for and where to locate them. b. knows how to physically manipulate and secure side rails.
7. Move patient to one side of bed. 	a. understands regulatory method of moving patients in bed. b. can use judgment regarding movement (depending on nature of illness). c. knows how to move signal cord, I.V., catheter, etc. if necessary without entanglement or dislodgement. d. knows how to deal with situation if patient refuses to be moved.
8. Remove foundation linens.	a. understands what constitutes the "foundation" linens and how to remove them.
9. Make the foundation of the bed.	a. understands exactly what "making the foundation" means and which linens to use to accomplish this.
10. Put side rail up.	a. see #6.
11. Move patient to clean side of bed.	a. see #7.

Task Components To Be Performed	*Implied Assumptions*
12. Position pillow under patient.	a. understands what correct position the pillow should be.
13. Move to the other side of the bed, lower side rail, pull dirty linen through.	a. understands and can use mechanism to lower side. b. can perform technique of pulling clean and dirty linen through without confusing the two sets of linen.
14. Re-position patient.	a. can remember original position in which patient was found. b. knows what positions not to put patient in depending on illness or condition. c. can tactfully deal with patient who wants to be put in a position he/she should not be in.
15. Place top linens over patient pulling dirty top layer out underneath clean top linens.	a. understands and can perform technique.
16. Miter bottom corners to make toe pleat.	a. has mastered technique of mitering corners. b. understands why toe pleats are made.
17. Change pillow case by gathering clean case down to corners and pulling up over pillow.	a. understands and can perform technique.
18. Place pillow in comfortable position, with attention to good body alignment.	a. can judge when pillow is in proper position even if patient is unconscious. b. understands what constitutes good body alignment.
19. Attach signal cord.	a. knows how and where to attach signal cord for easy patient access.
20. Adjust side rails.	a. see #6a.
21. Return bed to low position.	a. see #5b.
22. Remove soiled linen.	a. knows what precautions to take for soiled linen.

Task Components To Be Performed	*Implied Assumptions*
	b. knows where to dispose of soiled linen or who to ask for directions.
23. Wash hands.	a. see #1a.
Task components were drawn from:	J. D. Oliver, D. W. Lee, and P. King: *A Catalog of Performance Objectives, Criterion-Referenced Measures and Performance Guides for Nursing Assistance Occupations: Consortium of States*, 1976.

You may find that very frequently a slow, inefficient learner does *not* know, or cannot do, what you *assumed* he or she could do. Reviewing the entering behaviors required (*all* the entering behaviors) can make your job more pleasant and your efforts more effective. You cannot assume that the student already possesses all of the necessary entering skills unless that student demonstrates them in the required situation under the conditions in which training will occur.

A deficiency in many published compilations of task analyses is that they omit any mention of which instructional sequences and techniques could be employed to teach the tasks enumerated. This omission is critical, because it fails to answer many important questions. For instance, will the presentation format consist of:

a) a demonstration, followed by practice;
b) walking the student through each step of the total task in a complete cycle and providing feedback along the way;
c) demonstrating and having the student rehearse the first few steps until competency is attained, repeating the process with additional segments, and then having the student practice the entire sequence of steps; or
d) using some other format.

Proper planning would dictate that you not only prepare sequences to be performed by the student, but also that you would specify what you will do, how you will provide feedback, and how you will measure results. This need not be voluminous, though if training needs of the student require, it might be. The following are two examples which incorporate these elements:

TASK ANALYSIS

Objective: The student will provide for a patient's privacy while making that patient's bed.

Materials Needed: provided by setting.

Criterion: Criterion will be met when student correctly provides privacy for patient 100% of the time while making his/her bed.

Content:

(1) The student verbally expresses the importance of the patient's right to be shielded from the view of other people while his/her bed is being made.

(2) The student discerns which method of providing privacy is most fitting and employs that method.

   a. enter patient's room.
   b. note if patient is in private room or shares a room with one or more additional persons.
   c. if patient is in private room, privacy may be provided by simply closing the outside door to his/her room.
   d. if the patient shares a room with other persons, privacy may be provided by pulling the curtains around the bed so that he/she is shielded from the view of the other patients.
   e. when the bed-making task is completed, pull curtains back to original position, or leave door open when exiting from patient's room unless he/she asks to have it closed.

Process Task Analysis:

(1) Format: total task method.

(2) Feedback: simple positive phrase from instructor such as "fine," "good," or "ok" when task is completed correctly by the student in the classroom.

(3) Procedure:
   a. Teacher-student discussion of patient's right to privacy.
   b. Demonstration by instructor of curtain-closing, and/or how to put up and position a screen.
   c. Student repeats steps of demonstration to insure proficiency.

TASK ANALYSIS

Objective: The student will be able to place top linens over patient, pulling dirty top layer out underneath clean top linens.

Materials Needed: clean top linens; means to dispose of dirty linens.

Criterion: criterion will be met when student correctly places clean top linens over patient and pulls dirty top layer from under clean linens 100% of the time without removing all linens simultaneously or mixing up clean and dirty linens.

Content:

(1) The student will place clean linens in order over the existing linens which are covering the patient.

(2) Before securing the clean top linens at the bottom of the bed, the dirty top linens are pulled out from the mattress which secures them.

(3) The dirty linens are grasped with the left hand while the clean linens are held in place with the right hand.

(4) The dirty linens are then slid out from under the newly placed clean

top linens taking care not to remove the clean linens at the same time or to completely uncover the patient.

(5) Dispose of dirty linens and correctly arrange and tuck in clean top linens.

Process Task Analysis:

(1) Format: total task method.

(2) Feedback: performance of an incorrect technique becomes self-evident; positive verbal statement from instructor when technique is performed correctly while practicing.

(3) Procedure:
   a. Instructor shows filmstrip or video-tape presentation of linen-changing technique.
   b. Instructor demonstrates technique if students have questions.
   c. Instructor observes students practicing in the classroom, as they alternate posing as the patient in the bed and also as the assistant replacing the top linens.

In looking at task analyses, the following questions might help judge their quality:

1) Are the tasks stated behaviorally?

2) Does the analyses provide information about the tools, procedures, materials, conditions, or other variables which affect job performance?

3) Are there quantitative or qualitative measures to determine when the task is successfully completed?

4) Is information which may affect the learning sequence provided (frequency with which the worker must perform the tasks, the

relative importance of the task, the judged learning difficulty of the task, etc.).

5) Has the task analysis system or product been judged by workers in the occupation and by their supervisors? Has it been evaluated by an advisory committee? Or has the list simply been put together by one person without any reaction from others?

In utilizing feedback, you may want to expand your stock of positive responses beyond "good," or "right." The following list of phrases might provide you with additional options:

That's how I'd hoped you would do it.
That's really nice.
Thank you very much.
Wow! (Fantastic!, All Right!, etc.).
I like the way you're working.
Keep up the good work.
That's quite an improvement.
Good job (thinking, work, etc.).
Congratulations, you got ____ right!
That's right! Good for you.
I bet you are proud of the job you did on this.
I'm very proud of the way you worked (are working) today.
Very good. Why don't you show the class?
Very thorough (precise, interesting, etc.).
You are really on top of ____.
That looks like it's going to be a great report, (project, model, etc.).
I like the way ____ is working.
You're on the right track now.
It looks like you put a lot of work into this.
That's Great.
Much Better.
That's an interesting way of looking at it, (point of view, approach, etc.).
Terrific.
Beautiful.
Excellent work.
Marvelous.
Sharp.
That's Clever.
Very Creative.
Nice Going.
What neat work.
Now you've figured it out.
That's the right answer.
Now you've got the hang of it.
That's a good point.
That's a very good observation.
You've got it now.
You make it look easy.
That's coming along nicely.

The slow, inefficient learner may also have problems which demand concentrated attention. Three critical areas are attending (concentrating on the relevant cues and material), coding and classifying information correctly in memory, and retrieving this information accurately when needed. An additional critical area is the student's expectations. Someone who is accustomed to failure may learn to view himself or herself as a failure, expected to fail, and cease trying when failure seems imminent. The following suggestions can be utilized within a systematic instructional framework:

1) Provide some early success experiences to build the student's confidence and self-esteem.

2) Always let the student know when he has responded correctly. Immediate and frequent feedback increases motivation during the early stages of the learning process and reinforces correct responses.

3) Use recognition, praise, material rewards or special arrangements (e.g., time off) to reinforce correct responses.

4) Present material that offers a realistic challenge.

5) Move from basic material to more difficult material systematically.

6) Make minimal changes from one step to the next.

7) Help the student generalize from one learning experience to another. Present the same concept in various settings and relationships.

8) Provide enough repetitions of an experience so that the individual "over-learns."

9) Review frequently and space the repetitions over time.

10) Help the individual to make associations but do not present too many at once.

11) Provide variation in materials, activities, and length of learning experiences.

12) Present one new concept at a time. Be sure the student has

grasped it before introducing another.

13) Arrange materials to help the student recognize important points. Direct his attention to the relevant factors of a learning situation.

14) Relate concepts and skills to the environment in which he or she will use them.

For other specific deficiencies, these suggestions could help:

Problem: following directions

Possible Aids:
a) Use the same words for the same directions.
b) Teach the learners the different forms of equivalent directions.
c) Use lists for written directions instead of paragraphs whenever possible.
d) Have the student demonstrate that he/she knows what you want instead of relying totally on their answer to the question, "do you know what to do (or how to do this)?

Problem: poor observation skills

Possible Aids:
a) Point out significant details, similarities and differences to the student. Build in opportunities to learn and practice recognition of these features.
b) Present samples of poor, acceptable and excellent work. Again, provide opportunities for the student to learn and practice recognition of these differences.
c) Relate changes or variations in a procedure to specific conditions demanding them.

Problem: poor short-term memory

Possible Aids:
a) Be systematic. Don't skip "obvious" steps or judgments under the assumption that the student will also see them as obvious and include them without direction.

b) Break tasks into sub-tasks if a student is having troubles. If this still doesn't help, you may still be assuming too much. To find out, re-analyze the sub-tasks into even finer portions. If students still can't achieve success even with substantial effort, re-analyze the ways you are providing feedback and the methods you are employing to present these lessons.

c) Present one new concept or skill at a time.

d) Relate the new step to known steps in a direct and straightforward manner.

e) Again, follow a systematic sequence.

f) Demonstrate clearly and systematically. (Be sure you are clear and systematic.) What seems easy and even oversimplified to you can be very bewildering to someone who is just attaining a working knowledge of the area.

g) Use concrete examples, especially those which call for the active participation of the student.

h) Foster over-learning by building in practice and redundancy. (Redundancy isn't necessarily the repetition of a sequence in an identical way. It can include reworking of a sequence several times in the various shades of meaning and context likely to be encountered in the job environment.)

Problem: poor long-term memory

Possible Aids:

a) Build in spaced practice for new learning. (Spaced practice, such as several times over a several day period, is a more effective approach than massed practice - such as several hours of practice for one day only.)

b) Build in review of skills taught earlier.

c) Teach for transfer to new situations. Do not assume that such transfer will occur unaided.

Is deficient in one or more learning modes (visual, auditory, or tactile-kinesthetic).

In this situation, the person's problem may stem from difficulty in perceiving or integrating sensory input from visual, auditory or tactile-kinesthetic sources, or it may stem from difficulty in expressing oneself verbally or in writing.

If your initial assessment indicates that particular learners are having difficulty in one or more learning modes, you will have to adjust their learning experiences (and your presentation methods) if you wish to enhance the chance that these students will complete your program successfully. In short, you would individualize your instruction by modifying one or more of the following elements:

1) objectives,
2) content,
3) activities,
4) time constraints and/or schedules,
5) the number of students involved,
6) materials used (by you and by the students),
7) graduation requirements, and
8) procedures for measuring student progress and accomplishment.

In preparing an instructional strategy, you not only want to consider which learning modes cause trouble for the person and which he utilizes more effectively, but also whether or not information coming through two modes simultaneously, (such as during an audio-visual presentation), is helpful or causes "information overload" and subsequent frustration, confusion and poor performance. Many health occupations programs utilize audio-visuals extensively for all their students. Someone who has trouble in one or more learning/response mode may perform better when instructed in only one mode, even though others learn better when the same information is presented in several modes.

The key is to match the student's learning style with your instructional procedures. Several of the procedures described to assist the slow, inefficient learner would also help the learner who has troubles in one or more learning modes. In addition to those suggestions, the following could also be incorporated:

1) Let the student know that you are interested in him or her and are willing to help to the extent that your knowledge allows.

2) Express your expectations as specific standards, not general statements (e.g., "do a good job"). Be aware, however, that it may be extremely difficult, if not impossible, for some perceptually handicapped students to turn in a piece of work with no technical errors.

3) If you can, utilize ten or fifteen minutes a day to review points individually with the student. This will help undo some long-standing confusions. The following suggestions may prove helpful as you do this:

    a) Encourage the student to ask questions about the points he did not understand. Do not be surprised if these questions seem minor. They are important to the student or he wouldn't be concerned about them. Privacy for this session can be important, for the student's experience may have taught him or her to be wary of asking publicly in order to avoid the scorn of peers. Or he/she may have discovered that teachers are impatient with a simple question and that they answer it by repeating an explanation rather than developing a response which clarifies the issue for that student.

    b) Question the student (tactfully, but directly) to determine whether or not he or she missed specific pieces of information, or perceived them inaccurately.

    c) Because the student may grasp only a part of your general explanation due to his or her inability to sustain attention, go over key points of the lesson with him or her individually. This will give him or her the benefit of hearing it twice and asking questions.

d) Relate concepts you are presenting to his or her own experience or to concepts taught earlier.

e) Provide the student with ample practice. Usually he needs it to establish a particular skill thoroughly.

f) Ask the student to tell you the important points of the lesson, or explain a process step-by-step.

g) Many perceptually handicapped students report too many details and find it hard to summarize or select the most important thought from reading material. Help the student practice the selection and proper grouping of major steps.

h) Allow enough "think time" before an answer is expected.

i) Review, repeat important points frequently, and quiz the student in his mastery. Many perceptually handicapped students must "over learn" material in order to retain it over time.

4) The student with seriously deficient skills in reading, spelling and handwriting may need a family member or volunteer to read some of his/her material to him/her while his/her skills are improving. Talking Books for the blind might help fill this temporary need. The use of tape recorders and/or typewriters might help those with poor handwriting. Correcting papers for spelling and poor organization helps set specific standards of acceptability. The student may need specialized attention in both areas from a tutor or "special needs" staff member.

5) Review your exam procedures. Often the perceptually handicapped student reads questions slowly and inaccurately, rewrites slowly, spells poorly, organizes written work badly - yet may have an acceptable understanding of the material and command of the facts. It would seem only fair to have test results reflect his or her knowledge rather than his/her inadequate mechanical

skills. Oral tests and tape recorders could help here.

6) Reward improving and/or acceptable performance with recognition.

7) Find a way for the student to contribute to the class, either individually or as a member of a subgroup. Success at something will help him/her feel better about school and about himself/herself. The bright, nondisabled student teaches himself. The teacher leads the way and opens the doors. The student with deficiencies in one or more learning modes needs the teacher to enlighten, clarify, organize and support.

8) Work with the resource teacher or the special needs teacher if the school employs them. They cannot be effective in isolation.

In addition to altering your presentation modes to fit the student's learning strengths and channeling the student's responses into the modes of expression (verbal, written, tactile-kinesthetic) which best reflect what he or she knows, you may also wish to utilize a method which combines visual stimulation, tactile-kinesthetic involvement and (if the student vocalizes), auditory stimulation. The method can also be used to practice judgments concerning proper sequencing, grouping, or problem solving. The method is called the "structured overview." It allows you to make the abstract tangible and the theoretical concrete.

To implement the technique, the material to be learned must be recorded on cards, one unit of information per card. The student then manipulates the cards in a specified manner--sequences them properly, group them under proper headings, match elements, or other combinations. To illustrate this process, a structured overview series has been provided in Appendix A. The series can be used to help students learn the origins and insertions of the body's major muscle groups, visualize the location of the muscles on the skeleton, and transfer this information to correctly palpate the patient's muscles.

Under your direction, additional series can be developed by some students as part of a project. Their results can be used by all or by those needing extra help. (This would save you much preparation time.) To obtain maximum benefit from the cards you might wish to color-code categories for ease in selecting one or more areas for concentrated work. The "muscle card" series (Appendix A) can be used by students in independent study, or in lab sessions as part of practice in finding muscles on a live partner or as a means for students to test each other informally. The cards have codes on the reverse (where appropriate) so that a student can get immediate feedback concerning his or her responses. The cards allow the student to visualize and manipulate abstract information. You can probably come up with many other ways to utilize the "structured overview."

As you become more familiar with the students who have trouble learning and/or performing visually, auditorily, or in a tactile-kinesthetic format, you will no doubt realize that many of these students are not very efficient in the methods they use when studying. To help them, you may wish to initiate a "study skills improvement program." The extent and structure of this program will be determined by the students' needs, their willingness to participate, your own time available to help, and the availability of specialized services in your school. A study skills program could include any or all of the following elements:

a) Reading improvement (not only the basics of reading, but reading for concepts, key facts, and key methods, and "critical reading" - reading to determine implicit and explicit assumptions, errors in logic, errors in fact or method, and unjustified conclusions and/or extrapolations).

b) Vocabulary enrichment.

c) Note taking.

d) Use of resources.

e) Memory improvement.

f) Logical thinking.

g) Test taking techniques.

h) Study habits and skills.

Research has shown that efficient learning is a function of the skills with which a person

a) attends to relevant cues, information, processes;

b) "elaborates" on this attention by using appropriate study aids and practice;

c) codes and classifies the material being learned (as an aid to memory); and

d) retrieves this information accurately from memory in appropriate situations.

Effective study can include the systematic use of one or more of the following tools:

1) margin notes (for texts or workbooks);

2) underlining;

3) highlighting;

4) color-coding (e.g., underlines or highlights systematically in different colors, take notes in different colors, and so on);

5) outline material, (and outline the outline in a detailed way, then outline that outline in a few words), this allows a student to organize material very well and, if the latter two outlines are memorized and the original outline or narrative is re-read, the learner should retain a surprisingly large amount of information ranging from concepts to minute details;

6) file cards;

7) constructing mind pictures and "reading" from them as needed;

8) noting key words (list, underline, highlight);

9) constructing associations (verbal, pictoral, or physical); for instance, key steps in a five-step process might be associated with each of five fingernails of one hand, and as the steps are repeated the learner would press the appropriate fingernail with the other hand; this provides a visual cue, tactile-kinesthetic cue, and if the steps are repeated aloud or at least "aloud inside one's head" an auditory cue;

10) developing rhythmic phrases (homemade poems, songs, or rhymes consisting of important information);

11) developing acronyms (e.g., "JOE MAC" is a way of remembering the behavioral symptoms of organic brain syndrome; judgment, orientation, emotional responses, memory, attention span, and cognitive functions);

12) eliminating distractions (music, loud noise, scenic views, other people's presence, or whatever is distracting). If a text becomes distracting because of print showing through, insert a black paper under the page being read. If the page opposite to what is being read is a source of distriction, cover it with a blank paper;

13) studying in groups in order to vocalize issues and answers;

14) recording information and listening to it;

15) reciting aloud;

16) maintaining a higher attention level by using soft background sound;

17) using diagrams;

18) repeating information, processes, and so on;

19) moving one's body while concentrating on relevant material (in addition to helping maintain one's concentration, body movement-tapping a foot or finger-provides a tactile/kinesthetic association with the information under consideration);

20) doodling while studying (this can help in a way similar to "19" above);

21) "look-hear-write" when learning new terms;

22) manipulating tools and objects appropriately, and repeating the sequences until they are automatic.

Every student should not be expected to use all of these methods. For one thing, some are mutually contradictory. For another, the study methods, like your presentation methods, are most effective when tailored to the skills, interests, and needs of the individual student.

If you choose to initiate an informal study skills program, the following suggested lesson plans may help you to structure your efforts.

LESSON PLAN #1: TEACHING IMPROVED NOTE-TAKING SKILLS TO OPERATING ROOM ASSISTANT STUDENTS WHO ARE VISUAL LEARNERS.

Student Objectives

1. The student will be introduced to note-taking techniques which might be used during class.
2. The student will use the techniques during mock lectures with consequent feedback from the teacher.

Preparatory Activities

Instructor Preparation:

1. Suggested reading:

   Downes, M. G., Efficient Study Skills. Cambridge, Mass.; Educators Publishing Service, Vol. 1, 1969.

2. Prepare:
   a) copies of the note-taking skills to be discussed,
   b) short (5-7 min.) mini-lectures on topics which could be used during student practice sessions.

Student Preparation: None

Group Activities

1. Discuss the value to the student of picturing verbal material in his/her mind and transferring the picture to his/her notebook.
2. Discuss the following note-taking techniques after handing copies to the student.
   a) simple is better; listen or watch more than you write;

   b) discuss contents of the lecture with fellow students; practice quizzing each other on OR techniques, fluid names and doses, how to operate suction, etc.;

   c) look up and learn new words and medical terms as they come up; put them on cards and memorize them when you are doing the dishes, etc.;

   d) try to get the teacher's meaning by seeing his/her organization. Then try taking notes in outline form. This method is short and concise. (With some teachers, this will not be possible.)

   e) don't write down exact words unless it is a term or technique you are to remember;

   f) keep each subject in a separate notebook (try not to have five blue notebooks - you will inevitably end up with the wrong notebook in class);

   g) try to visualize or make "mind pictures" of what is being said. Don't hesitate to include quick sketches in your notes.

   h) when studying from notes:

      (1) Underline or highlight with felt marking pens. This will help you later when you study for exams.

      (2) Make file cards or visual pictures from important highlights in your notes. For example, make cue cards for yourself when you are learning various instruments or body structure.
3. Give a mini-lecture to the students. Show how the listed techniques should be used and illustrate using visual means: blackboard,

overhead projector, etc.

4. Give a number of mini-lectures (time permitting) and allow the students to take notes. Go over their notes individually and discuss any further recommendations.

LESSON PLAN #2: TEACHING AN AUDITORY LEARNER IN THE OCCUPATIONAL THERAPY ASSISTANT PROGRAM TO IMPROVE HIS/HER STUDY SKILLS.

Student Objectives

1. The student will develop an awareness of his or her learning deficit area and will learn a variety of methods to improve his/her study habits and skills.
2. The student will practice the skills learned through regular class assignments and teacher feedback.

Preparatory Activities

Instructor Preparation:

1. Suggested reading - lesson plan material taken from:

   Hayes, M. L., The Tuned-in, Turned-on Book About Learning Problems. San Rafael, California; Academic Therapy Publications, 1974.

   Downes, M. G., Efficient Study Skills. Cambridge, Mass.; Educators Publishing Service, Vol. 1, 1961.
2. Determination of the learning modes (auditory, visual) which give the student the most problems. This can be done by filling out checklists or scales (examples given in above reading) used in ascertaining specific problem areas.
3. Duplicate copies of the study methods which will be discussed.

Student Preparation: None

Individual or Group Activities

1. Discuss the results of the checklist or scales filled out by the teacher and/or student and why the student seems to be an auditory learner.

2. Discuss the following methods of study which might be employed by an auditory learner:

   a) concentrate on verbal information and lectures;
   b) study out loud as much and as often as possible; use repetition;
   c) use a tape recorder when studying;
   d) repeat words inside your head as you read or study;
   e) talk to yourself out loud about specific assignments;
   f) study with fellow students and quiz each other out loud;
   g) develop acronyms for material which must be memorized;
   h) make up cheers, poems or songs which can be repeated to yourself;

3. Choose a typical class assignment and review the suggested study methods.

   ASSIGNMENT: LEARN TO IDENTIFY THE BONES IN THE HUMAN HAND.

   a) concentrate on the lecture given in conjunction with this lesson and the main points brought out by the teacher;
   b) learn the names of the bones by repeating them out loud; repeat as often as is necessary;
   c) record the lecture about the human hand, or list what you must learn on tape and play it back often;
   d) repeat the names of the bones inside of your head as you study the charts in the text;
   e) talk to yourself out loud about the points you will be expected to remember;
   f) choose a classmate you are comfortable with and suggest a study session; quiz each other out loud;
   g) in order to remember the specific bone names, develop acronyms (words formed from the initial letters of each bone's name);
   h) make up a cheer, poem or song to assist you in remembering the hand bones.

Follow-up Activities

Have the student study the next class assignment using several of the methods discussed. Have him explain how he used the various methods and his/her feelings about their effectiveness when compared with previous study methods. Provide feedback on the accuracy and thoroughness with which the student utilized the study methods. Adjust these procedures as indicated. Remind the students that study methods must be implemented consistently and practiced frequently in order to be most useful.

LESSON PLAN #3: TEACHING A VISUAL LEARNER TO IMPROVE HIS/HER TEST-TAKING SKILLS.

Student Objectives

1. The student will be introduced to techniques designed to improve his/her ability to take tests.
2. The student will practice the techniques in class and discuss the results.

Preparatory Activities

Instructor Preparation:

1. Suggested reading:

   Hayes, M. L., The Tuned-in, Turned-on Book About Learning Problems. San Rafael, California,; Academic Therapy Publications, 1974.

2. Prepare:
   - a) copies of sample tests which the students might practice taking,
   - b) copies of test-taking techniques to be discussed.

Student Preparation: None

Class Activities

1. Discuss the characteristics of a visual learner and the manner in which the use of "mind pictures" can improve both test-taking and study skills.
2. Discuss the following test-taking tips:

a) read through the entire test before beginning;

b) indicate what questions you are answering and leave space after each answer for additional information you might want to add later;

c) answer the questions asked;

d) write a quick outline of the proposed answer in order to improve the response;

e) start your answer with the wording of the question (or restating it as you understand it) in order to clarify what is asked;

f) visualize answers. Try to use the mind pictures formed during study sessions: lists, pictures, outlines, mental reviews. Make margin notes of important points you recall which apply to answers you finished earlier. Do not backtrack until you finish the test, or until time is short.

g) go back and check the entire test for missed questions.

3. Have the students fill out short simple test samples using the techniques discussed. When they have finished, go over the results for correctness and completeness. Suggest adjustments in their methods as indicated.

Follow-Up Activity

Have student self-monitor any improvement in test scores after he or she uses the techniques discussed.

Be sure to stress that, when using study aids, the learner must practice these methods. They are more effective when used frequently and systematically, not rarely and haphazardly.

Many students may also possess "poor judgment," even though their cognitive functions may not manifest identifiable weaknesses. A significant contributor to this problem, in addition to those touched on above, might be the lack of a good problem solving strategy.

A workable strategy to solve problems is contained in Bradford, Leland P., Dorothy Stock, and Murry Horwitz. "How to diagnose group problems," in Group Development, National Training Laboratories, 1201 Sixteenth St. N.W., Washington, D.C., 1961. As these authors see it, the stages of problem solving include the following:

1. *Definition*

   A problem is a difficulty or unresolved issue that keeps us from doing what we want or need to do. Too often we treat symptoms instead of diseases, describe the situation but never define the problem. The nature of the underlying problem must be clear to everyone involved. This first step therefore is to get the relevant facts.

   - *to whom is it a problem?*
   - *what suggests that there is a problem?*
   - *what kind of problem is it (understanding, attitude, competence)?*
   - *how well does everyone involved understand the problem?*
   - *what does the problem seem to demand from us?*

2. *Involvement*

   Everyone involved must feel the importance of his or her participation in its solution. If we don't feel some stake in the outcome, our investment in the solution is limited.

   - *how willing are we to face the problem and accept the consequences?*
   - *how emotionally ready are we to work on the problem?*
   - *how well represented are those with special competence in areas related to the problem?*
   - *how well represented are those who will be affected by suggested solutions?*

3. *Clarification*

   Keep the basic problem in focus. Peripheral issues should be considered without losing sight of the main issue. The main issue may even change, but we must recognize that such changes occur and accept them by consensus.

- *what is the central issue?*
- *what is at stake?*
- *where is the real difficulty?*

4. *Review*

Progress in resolving a difficulty should be renewed periodically. Often we get so involved in details that we lose sight of the whole. This step is thus applicable to any of the other steps and at any point in the problem solving process.

- *how much agreement is there on the nature of the problem?*
- *has everyone felt free to speak his mind?*
- *have we identified the disease or just described the symptoms?*

5. *Solution*

Once the problem has been identified and clarified to the satisfaction of everyone, the suggestion of possible solutions is in order - but not until then. Jumping the gun can be disastrous. By the same token, the more freedom given in proposing alternatives the better will be the final solution. Premature criticism of suggestions tends to stop the flow of creative ideas.

- *what do we want to make happen?*
- *how many possible alternatives are there?*
- *how might several suggestions be combined?*

6. *Experimentation*

Proposed solutions must be pretested to assess their workability and narrow the choice. Since some solutions cannot be pre-tested thoroughly, it may be necessary to act without certainty.

- *do we have the necessary time and resources?*
- *what help can be expected from whom?*
- *what has been the experience of others?*
- *what needs to be modified and how?*

7. *Planning*

Implementing a solution requires careful planning in terms of specific personal responsibilities. No one can follow through on a plan when he/she does not know what is expected of him/her. Planning for action includes planning for evaluation of the results.

- *what is to be done?*
- *who is to do it?*
- *when is it to happen?*
- *how is it to be evaluated?*
- *what are the probable next steps?*

8. *Action*

No problem is solved unless someone does something. The planned solution must be carried through by the persons designated. This includes paying careful attention to the collection of data on the results.

- *what actually is to happen?*
- *who is involved and how?*
- *how is the situation expected to be changed?*

9. *Evaluation*

A review of the action taken may point out that the original problem was solved, or at least help avoid repetition of the same mistakes. More typically the action taken uncovers new problems, and the process begins again.

- *what evidence is there of permanent improvement?*
- *how adequate have our problem-solving procedures been?*
- *do the problems recur?*
- *are we learning from experience?*
- *what new problems have we identified?*

You may now be thinking, "it's all well and good to talk about a problem solving strategy and the steps involved, but how do you make it real to a student whose judgment is frequently questionable or even poor?" This is not easy. It requires planning and effort on your part, and especially the modeling of good problem solving strategies. A key element in learning to systematically solve problems is practice. The practice must be structured and coupled with extensive and supportive feedback. The following is a suggested lesson plan which you could build upon in order to teach "judgment" skills.

LESSON PLAN #4: TRAINING IN PROBLEM-SOLVING SKILLS.

Student Objectives

1. The student will be introduced to systematic problem-solving techniques.
2. The student will practice those techniques.

Preparatory Activities

Instructor Preparation:

1. Suggested reading:

   Mager, R. F., & Pipe, P., Analyzing Performance Problems. Belmont, California: Fearon Publishers, 1970.

   Carkhuff, R., The Art of Problem Solving. Amherst, Mass: Human Resources Development Press, 1973.

   Bradford, L. P., Stock, D. & Horwitz, M., How to diagnose group problems. In: Group Development, Washington, D.C.: National Training Laboratories, 1961.

2. Prepare:

   Video-taped or audio-taped situations to be used during class which depict situations that would require prompt, effective decision-making. These situations might be filed: a) with no solutions given to solve the problem; or b) with one suggested solution to the problem.

Student Preparation: None

Class Activities

1. Explain the purpose of the lesson: learning practical methods to solve problems.
2. Present and discuss a systematic method of confronting and solving

problems which might arise on the job. Example:

a) Get a statement of the felt problem.
b) Collect data about the problem-specific illustrations of when, where, how, and to whom it happens.
c) Restate the problem- define it.
d) Generate alternative solutions - at least three.
e) Choose an alternative and try it. If time is available, study the alternatives before trying one.

(Taken from: W.R. Daniels, Time Management Tactics for the Reality Manager. Process for Planned Change, Sacramento, California, 1977.)

3. Illustrate this systematic method using examples from other fields such as airplane pilot trainees developing "engine trouble" in a simulator, or a driver education student viewing films of incidents on the road which would require immediate problem-solving responses as part of a simulation.
4. Present the video-taped situations (examples given below) to individual students or teams and have them use the problem-solving methods discussed.
5. Allow ample time for discussion of alternative solutions.
6. Discussion of the individual situations may be opened up to the class after the individual or team attempts to solve the problem.

Suggested examples for use on videotape or audio-tape:

I. A pharmacy technician working in a drugstore receives a barely audible telephone call. The caller was in the drugstore a short time before to get a prescription filled. He now states he has taken some of the medication and is feeling extremely ill. (STOP)

II. A nursing assistant walks into a patient's room to assist her with her bath. She notices immediately that the patient is lying at an unusual angle in bed and appears to be unconscious. (STOP)

III. An occupational therapist working in a psychiatric ward walks into the craft room to begin an afternoon class. Sitting on the floor in the corner is a patient who is holding a piece of broken bottle against his throat. When he sees her he begins yelling and threatening to commit suicide. (STOP)

Follow-Up Activity

Homework assignments requiring students to develop new situations and the steps they would follow in solving the problem or problems involved.

If you see indications that one of your students is developing emotional problems, what can you do? A sensible approach would include the following:

a) observation
b) listening
c) conferring
d) referral, if necessary

In noting the student's behavior, ask yourself whether or not what you see, a) will be very detrimental to the person (and others) if it continues, and b) is a significant departure from the person's previous behavior.

If the student's academic performance is deteriorating, you may set up a conference to explore the situation with the student. During the interaction, pay attention to what the person says, the feeling tones present, and what isn't being expressed that you would expect under these circumstances. Don't do all the talking. Give the person a chance. Talking about one's difficulties is never easy and you don't want to assume that the student will make an organized and coherent presentation. More likely, the student will be fearful, anxious, possibly a bit resentful about being "called on the carpet" yet wanting to correct the troubles. (Your position of authority itself may generate some of these feelings.)

If after discussing the situation, you are unsure about a course of action, don't be too afraid, or too proud, to ask the opinions of your fellow teachers, counselors, staff psychologists, or whomever you respect. Remember to protect student confidences when seeking other's views. Asking co-workers for advice or suggestions will be much less productive if you haven't observed the details of the student's situation nor taken the time to listen to the student. You may feel that asking for help "goes against the grain" because you have been teaching a long time, and have handled many difficult situations. But asking for another opinion isn't demeaning, nor does it mean you can no longer handle your own students. (Many doctors ask each other for advice quite regularly.) Then too, it can be a boost to your esteem when you help a student over the rough spots, especially if the student initiates the request for help. But before trying to do so, if you do, ask yourself whether you are helping this person or trying to be a savior. Though possible solutions may seem obvious, you could unwittingly uncover problems that are more complex and difficult than they appear. Responding to a troubled student in a warm, accepting, empathic manner is practically always beneficial, but trying to become an "amateur analyst" can lead to a surprising amount of emotional turmoil for both parties. Then too, you don't have to feel guilty about not being someone's "savior" and don't feel bad about getting help if you feel a person's problems are too serious to wait (as in the case of someone who gives indications of suicidal intent).

If it becomes apparent that the troubled student needs assistance which is beyond your professional role and training, you might ask the student whether he or she has considered getting help from any other agency. (You shouldn't refer people to outside agencies without their knowledge and consent.) Two cautions are in order here. *First, if you immediately suggest other sources of help without fully listening to the student, you may convey the impression that you really aren't interested in the student, and are just trying to get rid of him. Second, you must be alert to overextending yourself, or implying that you are capable of determining the nature and scope of the student's problem (if this is not your area of expertise).* Neither a hasty brush-off nor a sentimental over-involvement is beneficial. Empathic listening and concern, coupled with a low key presentation of alternatives from which the student could choose, are most always beneficial. Not infrequently, a good listener is all a person needs to regain the will to carry on and a renewed sense of self-esteem.

Good Listening

But what does good listening consist of? Aren't we all good listeners? Not necessarily. The person who truly listens will nearly always manifest empathic understanding. When you have empathic understanding you are able to do two things:

a) *perceive* the other person's viewpoints, feelings and general situation *as he or she perceives them* (empathic perception), and

b) *communicate* that perception to the other person (empathic expression). To do this well usually requires that you:

1. CONCENTRATE ON THE OTHER PERSON'S EXPRESSIONS, BOTH VERBAL AND NON-VERBAL. You are no doubt aware of the classic non-verbal signs of boredom and disinterest, but students often express these and other feelings (anxiety, fear, and anger) in subtle ways. Take a few minutes to examine how you can determine non-verbally that a person is angry;....sad;...anxious;...afraid;...disinterested. Now ask yourself how you act, *non-verbally,* when you are angry, anxious, afraid, bored, or displeased. Does your emotional state show in your tone of voice? Your volume of speech? Your pace of speaking? Your facial expression - flickers, twitches, eye movements? Your posture? Your eye contact patterns? Your touching patterns (self or others)? Your gestures? Your spatial distance? *Whether or not you are aware of it, your emotions are being expressed in the non-verbal as well as the verbal medium.* Empathic communication requires that you be alert not only to the non-verbal messages of the other person but also to your own non-verbal statements, to see how consistent they are with other aspects of your communication.

2. ATTEMPT TO REFLECT THE OTHER PERSON'S COMMUNICATION DURING INITIAL INTERACTIONS. By restating the other person's responses, you can test the accuracy of your perceptions and lay the groundwork for mutual trust and understanding.

3. STATE YOUR RESPONSES IN LANGUAGE THAT IS UNDERSTANDABLE BY THE OTHER PERSON. By letting the person know you are aware of his or her frame of reference, you provide that individual with an experience of being understood. Feeling understood is an important foundation for developing rapport. When responding in understandable language, avoid using slang which you normally do not use. If you are not thoroughly familiar with it you are likely to appear silly or condescending.

4. COMMUNICATE RESPONSES IN A FEELING TONE SIMILAR TO THAT OF THE OTHER, BUT EXPRESS YOUR AWARENESS OF THE OTHER PERSON'S FEELINGS IN ANY CASE. By doing this, you make the other person aware that he or she is being "heard" at a feeling level. When appropriate, you may even express a wider range of feelings than the other person, and express them more intensely. In this manner, you can help the other person to experience and express feelings that may have been out of awareness or denied.

5. BE RESPONSIVE. Responsiveness provides a model for an active approach to problems and increases accuracy in communication. The more frequently you respond, the less likely you will fail to perceive the other person's viewpoint. This doesn't imply that you should talk a lot. If you do most of the talking (over half) you probably will have little positive influence. Silence or relative inactivity can be quite effective when used appropriately.

6. CONCENTRATE ALSO ON WHAT IS NOT BEING EXPRESSED. This is not as easy as it sounds. Does the person avoid expressing his or her own feelings? Does the person direct the conversation away from his or her part in the situation being discussed? Does the person seldom if ever seem to notice the feelings of others, or the effect of his or her actions on them? These are but a few examples of the many possible areas which might remain unexpressed by a person seeking your help.

Paying attention to what might be unexpressed is important. The deepest level of empathy involves filling in what is missing rather than simply dealing with what is present.

7. USE THE OTHER PERSON'S BEHAVIOR AS A MEASURE OF THE EFFECTIVENESS OF YOUR OWN RESPONSES. If a good communication base is created before you move to deeper empathic responses, the other person will very often shift to deeper levels also.

Talking With A Depressed Person

If the person you are interacting with appears to be depressed, the following additional points should be kept in mind:

1) Getting the person to talk may not be easy. People experiencing intense depression are often non-communicative.

2) While communicating,
   a. Do not offer forthright statements of reassurance. They generally do not help, and are sometimes interpreted as evidence of your insensitivity or tactlessness.
   b. Do not exhort the person to "snap out of it" or "pull yourself together." Such phrases are ineffective at best, and at worst are interpreted as callousness on your part.
   c. Do not ask probing questions concerning the causes and occasions of the person's feelings. Such questions will probably evoke superficial replies and may convey the impression that you lack understanding.
   d. Do not make interpretations like "You're depressed because you've lost your car," or similar observations. Such interpretations are offensive, even though they may be accurate, and will evoke hostility.
   e. Show that you recognize and understand how sad he or she is, how hurt, how dejected, how forlorn. Estimate the kind and

quantity of his feelings and describe it to him. Do so with a rising inflection so that if he or she chooses to interpret your assertion as a question he or she will be free to answer. The closer you come to the correct description of the person's feelings, the more you will strengthen his or her belief that you understand, and are not judging, punishing or being intellectually depricating.

f. If the person begins to communicate, you can use your posture, facial expression, and caring comments to evoke a fuller emotional expression and release of feelings. Avoid reinforcing inappropriate beliefs regarding the source of his or her feelings by prefacing comments with words like "you feel" or "you think" or "you gathered."

g. Almost invariably, a loss of some kind is involved which affects the way the person sees himself or herself. We all have a need to confirm how good we are or how impressive we are or how rich we are or how powerful we are. A threat to any of these, unmatched by the ability to avoid the danger, prevent the loss, or restore the loss produces feelings of depression.

Psychological First Aid For A Suicidal Person

When discussing a troubling situation with someone you may suddenly be confronted with the realization that the person may have suicidal inclinations. Though such a situation is far from routine, it is by no means unheard of. If you find yourself in the position of administering "psychological first aid" to someone who might be considering self-destruction, the following points should be kept in mind:

1) LISTEN WITH EMPATHY. A person experiencing emotional crisis needs someone to really hear what he or she is saying.

2) Evaluate the seriousness of the suicidal indicators. If the person describes specific self destructive plans, the situation is more acute than if the person expresses vague indefinite intentions.

3) If someone who has been depressed (in a lethargic, sluggish way) suddenly becomes agitated and restless, he or she may be likely to act out a self-destructive impulse.

4) Do not dismiss or devalue what the person says. Sometimes a person may express his difficulty in a low key, but harbor very distressed feelings beneath the apparent calm. Take all suicidal talk seriously.

5) Don't be afraid to ask openly whether or not the individual is thinking about suicide. Harm is rarely done by inquiring directly (and empathetically) about such thoughts. The individual may even be glad to talk about it.

6) Keep in mind that a person may feel initial relief after talking about his or her self destructive inclinations, but may still require professional follow-up.

7) Do something specific and tangible. Give the person something definite to hang on to, such as arranging to see him later at a specific time and place, or subsequently contacting a source of additional help. The distressed person may feel extremely frustrated and hopeless if it appears that the interaction with you accomplished nothing.

8) Do not avoid asking for assistance and consultation. Convey an attitude of firmness and composure so that the person will be able to lean on your strengths and feel that something realistic and appropriate is being done to help.

9) Do not leave the individual isolated or unobserved for any great length of time if he or she is acutely distressed.

Coping With Stress

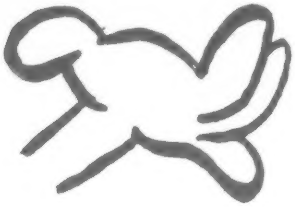
Stress is an ever present component of many health occupations. Whether as a student or an instructor, you will frequently face stressful situations or be in a position to help others face them.

The following suggestions can be equally effective for you or for others with whom you are working:

1) No matter how great your problems are, remind yourself (or have someone else remind you) that you have experienced hard times before and handled them. If you are optimistic you will be better able to cope with stress-inducing situations.
2) Keep a detached view of any problem situation. You don't have to put your self-worth, masculinity or femininity on the line when taking an exam or meeting deadlines.
3) If you can, rehearse how you will act in situations which you expect to be stressful.
4) Before entering any stressful situation, obtain as much information about it as you can, and try to acquire or improve skills which can help you in that situation. Fear of the unknown itself is frequently a great stress-inducer.

On a day-to-day basis, you may not face stress-filled crises, but still find yourself manifesting the signs of stress. If so, you may want to examine your daily routines and adjust them in one or more of the following ways:

a. Plan some idleness every day. It is especially fruitful to build it in after a hectic portion of your schedule as your reward for completing it. Don't feel guilty about "wasting time." Rejuvenating yourself isn't a waste of time.



b. Listen to others without interrupting or hurrying their speech. (Be alert. You may be doing this automatically.)

c. Read something which demands concentration but isn't job related.

d. Learn to enjoy the taste of food. (Eating at a leisurely pace helps.)

e. Establish a place in your home which you can use to be alone and experience solitude. Don't allow others to make you feel guilty or "odd" for desiring to be alone periodically. Even very short periods of solitude can be beneficial.

f. Avoid associating with overbearing, hypercompetitive people any more than necessary. They tend to confuse perfectionism with the pursuit of excellence, and their confusion can result in chronic dissatisfaction with their own work and the efforts and accomplishments of others. Such an outlook can lead to a spiralling cycle of effort-dissatisfaction-increased effort which is accompanied by greater and greater levels of stress. Frequently this cycle is broken only by phenomena such as heart attacks, "nervous breakdowns," ulcer attacks, or accidents.

g. Plan and experience leisurely, less-structured vacations. Throw away your hour-by-hour timetable and the two-page itinerary. If you have to rush, it's too much like work.

h. Live by the calendar, not the stop-watch.

i. Concentrate on enriching yourself with new psychological, cultural, and aesthetic experiences. This includes associating with people other than those who work where you do and hold highly similar values and priorities.

j. Concentrate on one task at a time. You may have several "irons in the fire" but devote specified periods of time to each alone rather than hopping randomly from one to the other.

Assertiveness

Not every cause of stress must be tolerated or compensated for. Frequently, a student (or staff person) becomes very tense due to stressful incidents which could be ameliorated, if only the person involved would assert his or her legitimate perogatives. "Assertiveness" is described as standing up for your own rights in direct, honest, and appropriate ways while maintaining proper respect for the rights of others. Assertiveness is not the equivalent of aggression. Aggression includes the violation of the rights and integrity of others to achieve your own goals. Non-assertive behavior occurs when you allow your rights to be violated (or violate your own rights) by failing to express your feelings and opinions honestly yet tactfully. Assertive people do not always achieve their goals or fulfill all their desires. Assertion requires skill in expressing your needs but includes the skill of recognizing when not to exercise your rights. In some instructional settings you may encounter students who subject themselves to a great deal of unnecessary stress by failing to act assertively. If you choose to teach some assertiveness skills, you would want to cover at least four basic elements:

1) Learning the difference between assertiveness, non-assertiveness, and aggression.
2) Identifying and accepting the legitimacy of both personal needs and the rights of others.
3) Reducing obstacles to assertive action (e.g., irrational thinking, guilt, anger, anxiety).
4) Developing assertion skills through practice.

If you wish to initiate instruction on assertion skills, the following lesson plan could serve as a guide:

LESSON PLAN #5: ASSERTIVE BEHAVIOR TECHNIQUES

Student Objectives

1. The student will experience the difficulty of handling demanding, aggressive persons in a professional situation.

2. The student will act according to hospital policies on releasing information and relinquishing medical records to medical and non-medical personnel.

3. The student will develop and use assertive behavior techniques when dealing with the public.

Preparatory Activities

Instructor Preparation:

1. Provide sufficient space for role-play exercises.
2. Obtain a video-tape machine to use during class.
3. Prepare copies of the three situations which will be role-played and discussed in class.

   Suggested review:

   Cotter, S. B., & Guerra, J. J., Assertion Training. Champaign, Illinois, Research Press, 1976.

   Lange, A., & Jakubowski, P., Responsible Assertive Behavior: Cognitive Behavioral Procedures For Trainers. Champaign, Illinois, 1976.

Student Preparation: None

Class Activities

Suggested situations for class practice:

I. You arrive at the medical records department at 8:00 a.m. and discover that after closing hours the previous evening, one of the interns removed a record without going through proper channels. You report this discrepancy to your supervisor who in turn contacts the intern involved. Now the guilty party is standing before you, extremely irritated that you reported him.

Problem: Any requests for records after hours must be processed through the nursing service department and removed only by the nursing supervisor.

Appropriate Action:

II. A representative of a major insurance company comes into the records department and asks for the chart on his client who has recently been hospitalized. The former patient is a 17 year old male who became partially paralyzed in a diving accident, and the authorization has only an "X" on it. The representative made a special trip from a town 25 miles away, and is adamant about looking at the medical record of his client today so that he does not have to return.

Problem: It is hospital policy that in the case of a minor, the authorization must be signed by a parent or guardian.

Appropriate Action:

III. A deputy sheriff comes into the office with an order signed by the District Attorney for a record to be released to him. The sheriff tells you that this is an emergency situation and that his job will be on the line if he doesn't return with the record.

Problem: Medical records supoenaed to court should not be released to anyone except the judge or at his order.

Appropriate Action:

Suggested Sequence of Class Activities:

1. Introduce the purpose of the exercise: learning to handle oneself assertively and comfortably in inter-personal situations.
2. Discuss in detail a variety of assertiveness techniques which might be used by the students in different situations including:
   a) how to refuse requests.
   b) how to make statements without feeling that an explanation must be given.
   c) how to deal with persistent persons.
   d) the empty-chair technique (an internal dialogue; one side speaking to the other side).
   e) the broken record tactic (the assertor continues to repeat a clear statement of his feelings on a specific point).

   f) how to disarm anger.
   g) using the "no, I'm sorry" rule.

3. Have the students make-up and role-play situations in which assertiveness on their part is necessary (at home, school, in public, etc.). The following teaching methods might be of use:
   a) modeling by the instructor.
   b) rehearsal with instructor or students.
   c) repetition.
   d) use of videotape machine.
   e) role reversal.
   f) coaching by fellow students.
4. Divide into work groups of five or fewer.
5. Have groups read over the above mentioned situations and take turns role-playing them while using one or more of the previously discussed assertiveness techniques. The instructor will move from group to group and observe or videotape the vignettes for further discussion and demonstration.
6. Give feedback to students in the areas of:
   a) technical response - are they following correct hospital policy in this situation?
   b) quality of interpersonal interaction - is this the most appropriate assertiveness technique which could be used with this person or in this situation?
   c) objectivity (in contrast to emotionalism or inappropriately judgmental remarks).

Follow-Up Activity

More extensive role-playing situations which the students could devise.

Chemical Abuse

One of the most prevalent problems which has roots in emotional upheaval is the abuse of psychoactive chemicals. It occurs in all settings among people of all educational and socio-economic levels. To even begin dealing constructively with the complexities of chemical abuse, these issues must be addressed from two perspectives: the organizational perspective, and the personal perspective.

From the educational organization's viewpoint, action directed at chemical abuse and chemical abusers must be coherent, consistent, and cooperative. Coherent action comes only when school personnel realize that: a) many Americans use drugs of all types; and b) problems generated by abuse of chemicals are complex, difficult to resolve and persistent. These problems will not disappear if they are ignored. To be coherent, organizational action directed at chemical abuse must take into account the differences between infrequent experimenters, heavily involved users, and drug sellers. (Individualization is needed in drug treatment as well as educational training.)

Consistent action at the organizational level requires a detailed chemical abuse policy that is implemented as thoroughly as any other policy.

Cooperation between the educational institution, students, school-affiliated organizations, and community agencies (police, courts, treatment programs, mental health centers), not only at the policy implementation stage but at the policy formulation stage, is required to address the needs of the students, the school and the community.

Chemical Abuse Policy

J. H. Langer, in an article entitled "Guidelines for School-Police Cooperation in Drug Abuse Policy" (Education Digest, 1976, 42, pp. 57-59) spelled out elements which should be in an effective chemical abuse policy:

1) Inservice training for teachers and other staff.

2) Communication of school policies to the community.

3) Explicit safeguards to insure that students are accorded due process in any proceedings.

4) Procedures for handling emergencies, such as drug overdoses or withdrawal.

5) Procedures for working with treatment agencies.

6) Procedures governing police-school interaction.

7) Guidelines for a school-based drug education and prevention program.

8) Specification of the limits of confidentiality surrounding student-teacher and student-counselor communication.

9) Delineation of teachers' and administrators' roles in dealing with student drug abusers, with the criminal justice system, with community treatment agencies, and with school-affiliated programs.

10) Procedures in regard to school employees who do not comply with the policy.

11) Formulation of reasonable academic disciplinary procedures.

12) Specific, positive roles for students and student organizations.

13) Specific, positive roles for teacher organizations.

14) Referral procedures for actual and suspected drug users.

What Do You Do

Whether or not your school has a functional chemical abuse policy, you may be called upon to deal with a situation involving the abuse of chemicals. If you yourself are, or are becoming, a dysfunctional due to over-use of drugs (including alcohol), you are doing nobody, *least of all yourself*, a favor by continuing. Your health, employment, and emotional well-being are threatened, and you are serving as a poor role model. In all likelihood, though, you will continue your drug abuse until your employer, your family, your physician, or the courts coerce you into a fresh look at your situation. If you aren't sure whether or not drugs are eroding your life, why not check with someone you trust who will give you a straight answer. (Your drinking buddy or fellow user would only help you sustain your current illusions and rationalizations.)

If, on the other hand, you are concerned about handling drug-related situations involving your students, the following suggestions might help:

> *Press your school or your union to develop and implement a formal, realistic chemical abuse policy.*
>
> *Consider the possible courses of action open to you in coping with a drug-related incident.*

To prepare for handling such incidents:

a) Determine what procedures, if any, your school has established for handling drug use, drug abusers, and drug-related emergencies.

b) Jot down in one place the phone numbers of appropriate school resources, drug crisis lines, hospital emergency rooms, ambulance services, and law-enforcement agencies.

c) Spend the time it takes to think through the legal, emotional, ethical and practical issues involved in dealing with people who use drugs, people who abuse drugs, and your own attitudes toward drugs. Situations which have legal implications include instances of drug possession, theft, or sale, drug-related counseling and medical emergencies.

If you are approached by a student who wishes to discuss drug-related problems with you the following guidelines may be helpful:

1) Keep all confidences, but tell the student how much he or she can confide in you, and what your course of action will have to be under certain circumstances.

2) Let the person communicate with you at his or her own pace.

3) Try to empathize.

4) Avoid premature advice. Try to help the person define the problem and initiate his or her own solutions.

5) Be aware that the student may hold stereotyped ideas (often negative) about what you will say when discussing drug-related issues.

6) Ask the student what he or she would like you to do in order to help.

7) Be alert to efforts designed to manipulate you.

8) Keep up to date on information about drugs, drug effects, referral sources and referral procedures.

Other considerations when dealing with students who have drug-related problems include the following:

1) Students may be very ambivalent about seeking help, even if they initiate the contact.

2) Students frequently "check out" and test a teacher before asking for help.

3) The student seeking help may be very uncertain about what the problem is and about what kind of assistance is needed.

Drug-related medical emergencies are frequently the result of overdose. Professional assistance from someone familiar with overdoses is a must, because the emergency may be some serious medical or psychological condition which resembles a drug overdose. After requesting help, make sure that you remain calm. Panic is contagious and if a student is "freaking out" your agitation will highten the student's emotional state. (Be sure to keep an unconscious person breathing.) If the person is agitated or panicky, try to move him or her to a quiet setting. If you are reasonably sure that the agitation stems from a bad reaction to drugs, let the person know that the unpleasantness will recede when the drug wears off. In any case, low-key emotional support is usually beneficial.

In working with students who have been through drug abuse treatment programs, you may find that many of them exhibit certain characteristics which warrant individual consideration. Among these are:

1) A residual alienation from the "straight" word, and a certain resentment because the person couldn't handle his or her chosen lifestyle.
2) Difficulty and lack of practice in goal-setting, decision-making, and following through on those decisions.
3) Difficulty in handling intense feelings of frustration, rage, anxiety and love.
4) Impulsivity in satisfying wants and "solving" problems.
5) Difficulty in accepting responsibility for his or her own behavior and the consequences of those actions.
6) A residual sense of guilt and self depreciation.

You must not assume that these characteristics are universally applicable to all recovering chemical abusers, but it would be equally unrealistic for you to expect a person who is trying to reorient his or her life to immediately blossom into a decisive, emotionally secure, industrious student who develops and implements appropriate career plans. Such behavior takes years to develop, even under favorable conditions. It is most important that you treat the person as an individual who is worthy of your attention, respect, and professional assistance. By doing so, you will help him or her grow both personally and academically and evolve into a happier, more functional human being.

Alternatives To Chemicals

In developing alternatives to the use of psychoactive chemicals, you must consider two factors: attitude and action. Ideally, a healthy attitude is present when:

1) A person realizes and accepts the fact that some pain, depression, anxiety, lonliness or other unpleasantness is a normal part of living.
2) A person realizes that solutions to personal and interpersonal problems requires effort and time, and cannot be solved quickly and effortlessly with chemical agents.
3) A person deals with strong feelings (e.g., anger, love) constructively without feeling the need to mitigate their intensity.
4) A person learns that many of the drug induced sensations and states of altered consciousness can be achieved without drugs by using systematic effort, concentration, and conscious self-control.
5) A person recognizes that happiness is a by-product of purposeful living, not a goal in itself.

Actions which can replace chemicals as a means of coping, functioning and self-definition must be realistic, attainable, and meaningful. Any proposed alternative must help people obtain self-understanding, improved self-image, feelings of significance, expanded awareness, or new experiences. These potential alternatives must also:

a. contribute to individual identity and independence;
b. offer active participation and involvement;
c. offer a chance for commitment, and
d. provide a feeling of group identification.

In addition, some of the alternatives must address noncognitive and intuitive aspects of existence, and provide a way to transcend daily routines. Alternatives to chemical abuse include:

a. relaxation exercises;
b. employment which gives the individual personal satisfaction, pride in the work, a sense of accomplishment, or a sense of contributing to a worthwhile endeavor;

c. development of self-awareness (physical-sensory, emotional, and interpersonal);

d. improvement of interpersonal relationships;

e. development of self-reliance; (There seems to be an almost universal sense of personal impotence, coupled with a free-floating rage, found in adolescent chemical abusers. This impotence-plus-rage is also prevalent among adult abusers of alcohol and other drugs);

f. aesthetic, creative and intellectual experiences;

g. philosophical-existential explorations, such as facing and attempting to answer questions like '"who am I," "what is my purpose in life, my role in society, the meaning of my existence?"';

h. spiritual-mystical experience;

i. social-political involvement (commitment and active participation while maintaining an individual identity are necessary if social involvement is to be an effective alternative to drug abuse);

j. meditation and other non-chemical techniques to achieve a state of consciousness that is so heightened and unmediated that it overwhelms and temporarily replaces the individual's habitual perceptions of self and world.

Managing Your Work

The section on prescribing for emotional problems would be incomplete without a word about your own emotional state. Because of the many new legal mandates and regulations you may feel overwhelmed and totally overscheduled. You may be correct. If so, re-read the section on stress management, and apply to yourself any of the suggestions which might help.

In addition, you might want to analyze your workload, daily activities, and schedule to see if you are burning up time and energy which could be better utilized on other activities. "I already know that my schedule causes many headaches, so what can I do about it?" William R. Daniels, a consultant for the Process for Planned Change organization of Sacramento, California, describes six components of effective time management. They are:

1) *Setting Goals and Priorities*

Once you are clear about what is to be achieved, you can practice a moment-by-moment judgment about priorities--what is most important to do now? Whatever can be done right now to move a step closer to your goals is the thing to do.

A simple but effective way to set priorities is to divide your activities into three groups: A's, B's, and C's.

A's: About 5% of your possible activities rate a first priority ranking. These lead directly to the accomplishment of goals. On any particular day, it is rare to have more than three "A" type activities--you should never be in doubt about what these are, and you should make every effort to focus attention and energy upon them.

B's: About 15% of your possible activities fall into this category. These activities are important and are related to your goals, but do not have to be done immediately. Activities which are not actually required to reach a minimal level of goal achievement are also "B" level. As you become more skillful at managing time for accomplishing A's, you will be able to perform more B's. As you perform more B's your reputation for excellence will grow.

C's: 80% of all your possible work activities fall into this category. These activities do not relate effectively to the accomplishment of goals. They are usually easy tasks that can be performed quickly and in large volume. You are tempted to do them in order to have a sense of "getting things done." They are a waste of effort. They rob you of time for A's and B's.

"But," you say, "I'm required to do all these tasks." Probably not. To find out, place all incoming requests and paperwork which you classify as a "C" in a drawer. At the end of the week, lay a divider over this stack and continue building the next week's layer. After one month, pull out the bottom layer and throw it away! If no one has mentioned the stuff for thirty days, it's probably not worth doing. If you are anxious about throwing it away, ask three questions:

1) Who can help me decide to discard this stuff?
2) If this stuff is important to my organization, can I recommend a less costly way of doing it?
3) Am I a pack rat? If so, when am I going to stop letting this garbage be my illusion of security?

2) *Keeping A Calendar*

You should have one master calendar which is always within reach. Your support staff may have duplicates, but the authority to confirm appointments must be reserved to you. When duplicate calendars are in use, coordinate twice daily.

Never schedule C activities. Treat C's as interruptions. This recommendation makes it possible to use a very small calendar with great effectiveness. It keeps you focused on A's and B's.

Always leave one hour a day unscheduled. If an entire day is scheduled except one hour, tell people you are completely scheduled. This saves time for the inevitable emergency.

3) *Keeping A Daily To-Do List*

Every serious time manager keeps a daily To-Do List.
In doing so,
-Keep your To-Do List close at hand.
-When you make the list, label the A's so you are cued in to deal with the critical items.
-When your To-Do List exceeds fifteen items, you are probably

doing one or more of three inefficient behaviors:

a. You're putting in too much detail.
b. You're "padding" the list with C's.
c. You're suffering from a more or less temporary delusion of superhuman capabilities.

4) *Use Memory Systems*

Effective memory systems serve the following purposes:

1) They store data efficiently and make it easily available when needed.
2) They screen out data that is irrelevant to the immediate task and aid concentration.
3) Memory systems allow us to pick up where we left off and facilitate the accumulation of results from short bursts of effort.
4) Memory systems foster pattern recognition and the discovery of short cuts to the heart of the issue.

Memory systems include the following:

1) Filing systems.
2) Graphs, charts, posters, pictures, slogans.
3) Procedural manuals.
4) Notes written on large charts during the meeting so that everyone can see what is being said and recorded.

5) Logs, journals, diaries.
6) Follow-up memos.
7) Tickler files--usually card files arranged by date to remind you of commitments which must be acted upon.
8) Calendars and To-Do Lists.

-Don't clutter your organization's permanent files with your memory systems. Keep your memory systems as "working files."

-Don't clutter anyone's systems with "C" tasks.

-Try to avoid memory systems that involve a great deal of writing. Instead, use charts, graphs, forms, and card systems. Furthermore, never collect data randomly. If it isn't worth organizing, it isn't worth keeping.

-Don't be afraid to collect data you previously ignored, but never collect data that is irrelevant to your "A" list.

5) *Concentrate*

Learn to do one thing at a time with complete devotion even if you can do so only for brief periods. Concentration is not the same as completing your task in one sitting. It allows you to make real progress on a task even during very short periods of effort.

6) *Closure*

Much time is saved by steering events and activities to a clear ending. Summaries, announcement of decisions, celebration of accomplishments, declarations of defeat, pronouncements of death all liberate us from ambiguity and allow us to regroup ourselves for a new burst of energy.

Meetings are also notorious time wasters. To minimize this, the following outline is offered as a guide to the development of effective meetings:

I. Essentials for a good meeting:
   A. Start and stop on time.
   B. Have an agenda. If possible, make it available to participants before the meeting. An agenda indicates that the chairperson and others have spent time planning the meeting.
   C. As chairperson, move the meeting along but give ample opportunity for both the majority and minority opinions to be heard.

D. Attempt to hold meetings in locations which contain:
   1. Proper temperature control.
   2. Comfortable seating.
   3. Properly functioning sound equipment.
   4. Adequate lighting.
   5. A minimum of distractions, such as street noises, telephone calls or announcements over public address systems.

E. Make sure a blackboard, chalk, projectors, extension cords, and so forth are available. Make certain that electrical outlets are available and functional.

F. For small groups, seating arrangements are especially important. Being seated around a table or in a "U" formation encourages informality and open discussion.

G. Schedule breaks during long meetings. If you have refreshments in or near the meeting room it will expedite return to the meeting room on schedule.

H. Records of meetings should be kept and made available as soon as possible after the meeting.

II. Order of Business
   A. Call meeting to order.
   B. Reading and approval of the minutes of the last meeting.
   C. Treasurer's report and reports of other officers as appropriate.
   D. Reading of communications.
   E. Committee reports.
      1. Executive
      2. Standing
      3. Special
   F. Unfinished business.
   G. New business.
   H. Announcements.
   I. Program.
   J. Adjournment.

Communication Barriers

Even if the chairperson adheres to a sensible format and process, you still may be involved in frustrating, unproductive conferences. These difficulties may be due to problems of communication or defective listening by one or more participants.

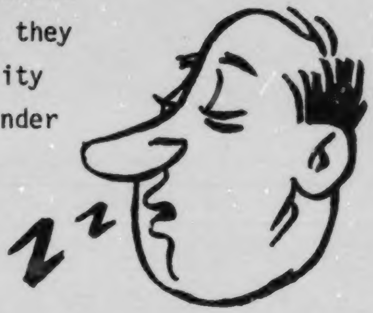
Barriers to communication are often subtle and disguised. One very common barrier is the "mixed message." A mixed message contains at least two contradictory meanings, one stated verbally and one implied either through tone of voice, gesture, or other non-verbal means, or through the content itself. Frequently, sarcastic statements, flippant remarks, direct unsolicited advice, and joking remarks can be viewed as degrading. Unsolicited advice, for instance, might be taken to mean that the advice giver feels that the advisee is stupid, incapable of handling the situation, and inferior to the advice giver. A well meaning advice giver might irritate people without even realizing why.

In addition to intentional or unintentional mixed messages, several other conditions may create communication barriers. The first of these is self-preoccupation. An individual who is focusing almost entirely on the impression he or she is making may miss most of the message.

A second barrier to effective communication may be the *presence of an emotional block* to the intent or implications of the message. Words may have become emotionally charged for an individual because of childhood experiences or current circumstances. For example, an unaware white person might evoke a great deal of hostility in a black man by using the term "boy" or "colored boy." The intended message could be lost when coupled with such a provocative term.

A third potential barrier is *hostility*. When people engage in a hostile confrontation, they often distort messages from each other in ways that contribute to the development of greater hostility. How often have you heard discussions tinged with hostility where both parties were so busy defending themselves that they apparently didn't realize they were not even discussing the same issue?

The *charisma* of a speaker may serve as another barrier to effective communication. A charismatic person can often package cliches so well that they seem very significant. Such charismatic ability can involve listeners emotionally, but can hinder effective communication by numbing the listener's skepticism and critical reasoning to the point where he or she fails to question underlying assumptions, or fails to ask for clarification and elaboration. Successful politicians often possess highly developed charismatic traits. Unfortunately, an utter lack of charisma may cause listener's to "turn off" a speaker whose ideas are significant and relevant.



The speaker's or listener's *past experience* can also serve as a barrier to accurate communication. If, for example, you have found many staff meetings to be devoid of important ideas, you will soon expect future staff meetings to be equally empty. Such expectations may lead you to treat lightly ideas that, in another context, you would find worthy of your undivided attention.

An additional communication block is posed by the individual who has a *"hidden agenda."* Someone with a hidden agenda may hear all messages only in reference to his or her own needs, or may screen out any communication which doesn't relate to his or her own interests. If a person's "hidden agenda" is to undercut a fellow worker, for instance, he or she may attempt to manipulate others' perceptions of that person's value and competence by seemingly off-hand remarks, such as "we all know the boss wouldn't buy that idea," or "you know that (idea stated) is pure speculation," or by praising the person in a condescending fasion.

Cultural differences in language and speech patterns may present another barrier. Slang, phrasing, and use of idioms may very greatly between, for instance, a resident of Appalachia and a resident of Brooklyn. Since it seems to be a human tendency to view anything "different" as

inferior, unfamiliar speech patterns can greatly hinder interpersonal communication for reasons beyond simple unfamiliarity.

Stereotyping, whether by race, sex, job category, economic class, nationality, or handicap, can hinder or block effective communication. If, for instance, we view somebody as radical or reactionary because of their personal appearance, we might treat anything they say as radical or reactionary without even examining their statements.

The *physical environment* alone may create barriers to effective communication. A hot, smoke-filled room can make it very difficult for people to focus their attention on anything.

The final barrier to effective communication is *defensiveness.* An insecure, threatened individual often interprets questions as accusations, and answers with justifications. Such defensiveness might be present when people of different authority or perceived status levels try to communicate. One person may be preoccupied with impressing the source of power, while another may be defensive because he fears that his own job or status is threatened. In addition, any high-status individual must deal with the hostility of the envious, the stereotyping of the power worshiper, the emotional elements generated by all of these conditions and his or her own stereotypes and perceptions about those people.

The key to alleviating these barriers lies in perceiving them and calling attention to them tactfully.

Ineffective Listening

Signs of unproductive listening habits on the part of others (or even, heaven forbid, ourselves) are these:

1) *On-off listening*. When we tune into our own thoughts, then the

speaker's, then back to our own, we are wasting both the speaker's time and our own.

2) *Red flag listening*. To some individuals, words are like the proverbial red flag to the bull. The terms "communist," "budget," "main office," "new procedure," and the like are signals to which they respond almost automatically by tuning out the speaker and assuming they know all they need to about his viewpoint.

3) *Closed mind listening*. Sometimes we decide quickly that the subject or the speaker is boring and senseless. Often we think we can predict what he or she will say. We then feel that there is no reason to listen because we will hear nothing new.

4) *Don't-confuse-me-with-the-facts listening*. People do not like to have their pet ideas, prejudices and points of views challenged. Consequently, when a speaker says something that clashes with what they believe and hold firmly, they may unconsciously stop listening or even begin planning a counter-attack.

You may be unable to correct the inadequacies of your fellow workers, but you can improve your own listening habits. During meetings, show interest, express empathy, articulate and isolate problems being addressed (including problems which are part of the process of the meeting and apparently unrecognized, or not verbalized by others in attendance), and cultivate the ability to be silent when appropriate. In addition, control your tendencies to argue, interrupt needlessly, pass judgment prematurely, presume to speak for and advise others unless requested to do so, jump to conclusions, or let your emotional responses rule your reason.

Burnout

OK, you make some effort to reduce your levels of stress, revise your schedule from a gross overload to an average "run of the mill" overload and brush up on your communication skills, but you still feel rotten. You may be suffering from the phenomenon known as "burnout." How can you tell for sure? Dr. Ayala Pines, Department of Psychology, University of

California, Berkeley feels that people who are burned out often wake up exhausted - so unhappy they can't sleep. It takes all their effort just to survive. They are frequently depressed and may feel there is nothing left for them even though they might be in the prime of life. They see themselves as failures and worry that people will discover how little they know. Their colleagues get on their nerves. They are impatient with their families and with clients. Pills, alcohol, overeating, and similar escapes may be used to ease the pain. They are no longer a major force during meetings. They have difficulty meeting their own obligations, when previously they could be counted on to bail others out in a pinch.

What kind of pressure and stress contribute to burnout? Many people who burn out have no variety or challenge in their jobs, or they may have too much or little to do. They may lack sufficient autonomy and feel that decisions are imposed on them by an impersonal bureaucracy. This creates a sense of helplessness. People who are burned out may feel insignificant, as if what they do doesn't really matter.

Some people deal with burnout by quitting their jobs. Others may stay on the job and vegetate. Still others use burnout as a growth experience. They turn their energy and anger toward things that could be changed in areas where they can have an impact.

To minimize or avoid burnout, ignore what can't be changed. Don't think about everything you have to do but rather the task at hand. When you are pressed to make a decision, take the time to think it over. This way you can maintain control and a feeling of autonomy. Develop an attitude of detached concern in which you are both involved in your work but removed enough to maintain objectivity. Develop and maintain a sense of humor. Learn to laugh at yourself. If you experience a conflict between your roles at home and work, compartmentalize them and allow a period of decompression between them. Share work concerns with colleagues because only they can give you concrete suggestions for change. Discuss your goals with co-workers as well as your problems. Try not to feed into co-worker's bitterness and self-pity. The relief is only temporary and often leads to the growth of a very negative atmosphere. By staying conscious of your goals, you can direct more energy into accomplishing them. A strong mutual support system among co-workers can be a very important factor in preventing burnout.

In designing systems to compensate for mobility, manipulation, strength, endurance or coordination problems, the usual approach is to select from these alternatives:

a) develop a jig (assistive device) to overcome or compensate for the deficiency;

b) purchase commercially-built compensatory equipment;

c) adjust your classroom strategy and tactics; and

d) analyze jobs to provide data needed for possible job restructuring.

Locally developed devices for physically disabled persons could include lever-assisted door handles and drinking fountains, alterations in control switches, rotating file bins (for medical or other records), and adjusted furniture (desks, tables, and so on). Commercially available equipment includes devices to assist blind people such as:

a) The opticon - a small device which allows the blind person to read blueprints, typescript or cursive writing.

b) Talking calculators.

c) Talking body-temperature thermometers.

d) Light probes.

A publication entitled Sensory Aids for Employment of Blind and Visually Impaired Persons: A Resource Guide has been compiled by the Sensory Aids Foundation and published by The American Foundation for the Blind. The guide contains technical and functional descriptions of over 130 devices used by blind and partially sighted persons in employment situations. Categories of the sensory aids listed include:

braille devices
calculators
computer accessories

computer terminals/data processing equipment
labeling aids
light probes
liquid level indicators
measurement devices: electrical, physical, temperature, pressure and humidity
reading aids
sound recorders
sound compressors which allow a person to speed up tape recordings while avoiding the high pitched "Donald Duck" voice quality associated with "fast" on a typical recorder.
tactile graphics
telephone answering equipment
time keeping devices
tools
typing aids
electronic/optical visual aids

A copy of the catalogue can be obtained (for a fee) from The American Foundation for the Blind, 15 W. 16th St., New York, N.Y. 10011.

Commercially available equipment to assist deaf persons include:

a) visual fire alarms

b) vibrating devices (to replace alarm clocks or other auditory signals)

c) typewriter lights (to replace the bell)

d) phone communication aids, such as:

(1) Hard-of-Hearing Amplifier
-a device built into the telephone receiver with an adjustable volume control
-volume can be turned down when used by others
-obtained through a local telephone company

(2) Portable Telephone Amplifier
-a battery-operated device with an adjustable volume control

that is slipped over any telephone receiver
-convenient to carry in pocket or purse
-obtained through a local hearing aid dealer or a local electronic or stereo shop

(3) Signal Light
-a visual alert that is attached to a phone and blinks when the phone rings
-obtained through a local telephone company, a local hearing aid dealer, or a local electronic shop

(4) Telephone-Coupled Communication Equipment

Teleprinters enable a broad segment of the deaf population to use the telephone. For most of teleprinter devices a sending party types out a message which is converted, through an electronic coupling device, into impulses and sent over telephone wires to the receiver. The receiving party's coupling device reconverts the impulses into signals which visually reveal the message.

General information about teleprinters, couplers or reconditioned equipment may be obtained by contacting:

Teletypewriters for the Deaf, Inc.
Post Office Box 28332
Washington, D.C. 20005

(5) Silent Pager
-a pocket-sized radio receiver that alerts its wearer with a series of silent, pulsed vibrations
-activated by the same radio transmitter that an organization may use for other individual paging devices
-can also be activated by calling an operator at a local Radio Common Carrier which provides round-the-clock paging, for a monthly fee.

Manufactured and distributed by:

Bell and Howell
78 Blanchard Road
Burlington, MA 08103

These devices can be obtained locally from a paging equipment distributor

(6) Electronic Handwriters

-compact, self-contained systems (compatible only with identical units) which "talk" to each other by leaving permanent, hand-written messages at both sending and receiving points

-utilize telephone or direct wire connections

-typing skills are not required

-user can sketch, draw and diagram during conversation.

Brand units and manufacturers:

Telepen
Telautograph Corporation
8700 Bellanca Avenue
Los Angeles, California 90045

Telenote
Talos Systems, Inc.
7311 E. Evans Road
Scottsdale, Arizona 85260

Electrowriter
Victor Graphic System, Inc.
3900 N. Rockwell
Chicago, Illinois 60618

Instructing Deaf Students

In adjusting your classroom strategy and tactics to accommodate someone with significant problems, you should analyze each person individually not only to determine his or her vocational, academic and independent living profiles, but also to see how the person's temperament interacts with those factors. There are, though, some general guidelines to keep in mind. For example, individuals who are deaf or hearing impaired will communicate in various ways. Some will use speech only. Others will use a combination of sign language, finger spelling and speech. Still others rely primarily on writing, while some use a great deal of body language and expression to help clarify their meaning.

If you are a hearing person, the key to successful communication with a deaf person is to discover (by trial and error if need be) which combination of techniques works best. The specific factors to keep in mind when communicating with a person who is hearing impaired include these:

1. There are several kinds and numerous degrees of hearing loss. The hearing impaired person may have trouble hearing only high pitched sounds or only low pitched sounds. He may hear you but not be able to understand you. He may hear well in some situations but not at all in others.

2. When you meet a person who seems inattentive or slow to understand, his hearing, rather than his manners or his intellect, may be at fault.

3. Remember that the hard of hearing may depend greatly on reading your lips to aid their understanding. They do this even though they may be wearing a hearing aid, for no hearing aid can completely restore hearing. Help them by trying to speak in good light and by facing both them and the light as you speak. Don't assume that a proficient lip reader (speech reader) needs no further assistance. Only 26% of speech is visible on the lips, and unfamiliar words are nearly always uncomprehensible to a speech reader.

4. Speak distinctly, but naturally. Shouting doesn't clarify sounds, and exaggerated mouthing of words, or speaking very slowly makes you harder to understand. Since most of us speak very fast, slowing down a little can help.

5. Attract the attention of the deaf or hearing impaired person before speaking. If necessary, touch his hand or shoulder lightly. Help him grasp what you are talking about immediately by starting with a key word or phrase. If he doesn't understand you, don't repeat the same words. Substitute synonyms.

6. If the person has one "good" ear, favor it. Don't be afraid to ask someone with an obvious hearing loss whether or not he has a good ear and, if so, which one it is.

7. Facial expressions are important clues to meaning. An affectionate or amused tone of voice may be lost on a hearing impaired person,

so try to convey your emotional tone through facial expressions and body movements.

8. In conversation with a person who is hard of hearing, don't be afraid to jot down key words.
9. Many hearing impaired persons - especially teenagers, who hate to be different - are unduly sensitive about their handicap and will pretend to understand you even when they don't. If you detect this, tactfully repeat your meaning in different ways until it is understood.
10. In social settings, provide adequate lighting, or choose well lit environments so the hearing impaired person can read your lips better. In group settings, try to arrange yourselves so the hearing impaired person has a clear view of all potential speakers.
11. Don't exclude hearing impaired friends from participating with you when the activity involves speech or music. Even profoundly deaf persons can usually feel and enjoy music's rhythm and vibrations.
12. The speech of a person who has been deaf since birth (or for many years, if the loss occurred after language acquisition) may be difficult to understand and, unlike a hearing person, the deaf person's natural pitch and inflection cannot be maintained by modeling others and monitoring his or her own speech. Watch his or her face closely to help you understand the communication more accurately.

When instructing a person who is hearing impaired or deaf:

1. Get the attention of the student before making assignments or announcements. Ask both hearing impaired and normal hearing students to repeat directions for the benefit of all. Until you are familiar with the hearing impaired person's capabilities, have him or her repeat instructions so that you are sure they are understood.

2. Do not move around the room while discussing important material. Select one spot that is most advantageous for the hearing impaired or deaf student. Make certain that there is good light on your face to aid him or her in reading your lip movements and facial expressions. Keep in mind that it is hard to read the speech of a moving person, and impossible from the side. Even a slight turn of the head can greatly increase the difficulty experienced by a speech-reader. Note also that if you have a beard or moustache, or habitually chew pens or hold a hand near your mouth, you are creating additional difficulties for a person who relies on speech-reading. (A beard hinders speech reading because it obscures the cheeks and jaws, which, when visible, provide significant cues to the words being spoken.)

3. Face the class when explaining material you wrote on the board. Draw the figure or write the example on the board before explaining the lesson. When explaining blackboard diagrams or other visuals, build in appropriate pauses so that a deaf student can look down to make notes without missing part of your comments.

4. Rephrase statements if you feel you might be using words having few or ambiguous lip movements. If clarification is not made at the beginning of the lesson, the hearing impaired student may not discover the topic of discussion for several minutes.

5. Explain new vocabulary before the lesson is presented if at all possible.

6. Permit and encourage the hearing impaired student to read ahead. This will help him to become familiar with the vocabulary and enable him to better follow and participate in the classroom activities.

7. When possible, have students stand in front of the class when giving reports or making presentations so that the hearing impaired students can more easily see the speaker's lips.

8. Allow the student with a hearing disability to recite and read aloud. Any speech problem resulting from a hearing impairment should not be a reason for exclusion of oral recitation.

9. If you have access to students' scores on IQ tests, interpret those of deaf students with extreme caution. Relatively low scores, especially on verbal portions of the test, are often due to a lack of experience in and imperfect acquisition of language, instead of limited ability.

As an instructor of someone who is hearing impaired, you may have occasion to work with an interpreter who communicates information to the deaf person and from the deaf person to others. To make this instructional situation more effective keep the following points in mind:

1. You will be communicating with hearing impaired individuals through another person. Even so, maintain eye contact with the hearing imapaired individual, not with the interpreter.

2. The interpreter will usually adjust to your pace. Sometimes you must adjust to the pace of the interpreter. If this is necessary the interpreter will request you to stop momentarily and repeat, or slow down.

3. Generally, the interpreter will stand either to your left or to your right so that the hearing impaired student can maintain eye contact with both of you.

4. Wherever the interpreter stands, the lighting must be good.

5. In using demonstration and visual aids, allow extra time for the student to see what is being demonstrated or shown in addition to watching your lips and face. With hearing students, you can turn your back on them and continue to speak (as when you write on the board). With deaf students, you must break the instructional process into successive steps in order to facilitate complete understanding, and you must remember to speak only when facing in their direction.

6. When reducing or turning off the lights to use an overhead projector, slides, video tapes, and/or films provide a small lamp or spotlight for the interpreter.

7. Sign language does not contain signs for every word in the English language. It particulary lacks signs for technical terms. For this reason the interpreter will often be required to spell out such words with fingerspelling and sometimes add a definition of the term. When you write technical terms on the blackboard you help both the interpreter and the student. (Don't be afraid to write out any other pertinent information either, such as time changes, additional instructions or variations in format.)

8. Question and answer periods may pose problems. If the deaf student is unable to vocalize his question, he must sign the question to the interpreter. The interpreter will then vocalize the question for you. The answer will then pass to the student through the interpreter. Be sure to let the other students know who is speaking to whom.

9. Hearing students can take notes while listening to a speaker. Deaf students cannot do this very well because they must focus their attention on the interpreter. When complex topics will be discussed, an advance outline is helpful. If you write information on the blackboard, allow enough time for the deaf student to copy it before continuing with your presentation.

It is useful for you and the interpreter to become acquainted at the beginning of a course. At this time, clarify your respective roles, obligations, and needs. You are always the instructor; the interpreter, merely your "voice." You cannot expect the interpreter to be, or become, an expert in your specialty. Nor can you expect the interpreter to be a tutor for the deaf student unless that duty was explicitly provided for in the interpretor's employment arrangement.

Instructing Blind Students

You may also have occasion to instruct someone who is blind. If this occurs, there are several things you can do to make your interaction progress smoothly. Among these are:

1. If a blind person seems to need help, offer it after identifying yourself and letting the person know you are talking to him or her.
2. When guiding a blind person, don't push. Let him or her grasp your arm and follow you.
3. In conversation, don't worry about using words such as "see" and "look."
4. Speak directly to a blind person, not through someone else. Blindness doesn't affect one's hearing.
5. As you talk to a blind person, look directly at him or her. A blind person is often able to discern through sound cues that you are not looking and may interpret this as disinterest or boredom.
6. Minimize unnecessary sounds such as paper shuffling and pencil tapping when talking to a blind person. Since comprehension of your words is not aided by visual perception of your lips and face as you talk, he or she must depend totally on what is heard in order to understand you.
7. Be aware that many blind persons, especially those blind from birth, manifest fewer or less reliable facial expressions than you are accustomed to seeing in your conversational partners. A blind person may have never learned to integrate subtle facial expressions into a total pattern of communication.
8. When leaving a blind person, let him or her know you are going.

9. If a blind person uses a leader dog, don't distract it by petting or playing with it.

In the instructional setting there are several suggested teaching techniques useful when educating a blind student:

1. Help the blind student develop familiarity with objects through verbal descriptions coupled with touch, kinesthetic and olfactory contacts.
2. Conduct orientation training to alert blind trainees to the positioning of equipment and materials. Orient the person to the room, to stationary objects (supply cabinets, machines, and so forth) and to his or her work station. When orienting a blind person to particular pieces of equipment, allow him or her to explore its overall dimensions as well as its working parts (when the machine is off). At this time, orient the person to areas he or she would want to avoid when the machine is in operation. (A blind person is every bit as concerned about safety as you are. You should have a very attentive student for this portion of the orientation.)
3. Use sound, vibration and touch cues to develop work routines.
4. Don't give in to the temptation to do things for the blind student that he or she should learn to do unassisted.

Employment Goals

The most crucial element in the vocational training of someone with a physical/psychomotor dysfunction is not that he or she completes training successfully, but that he or she can become and remain productively employed. You must always keep this goal in mind, and plan for it from the beginning of the training process.

Why should you start so soon? For two reasons:

a) You, or someone from your organization, may have to analyze the desired job in order to determine what, if any, adjustments will be needed, either in the training process or in the future job itself.

b) You, or someone from the school, may have to spend time and effort in placing the newly trained job seeker on a job.

The job analysis should cover two major areas: the environmental factors surrounding the job, and the job itself. Relevant environmental factors include the following:

a) availability of transportation (public or private).

b) suitable parking at the work site.

c) the amount of travel required as part of the job.

d) the presence of and accessibility to elevators if the building is more than one story high.

e) accessible bathrooms, cafeterias, meeting rooms, and so forth.

f) the willingness of the employer to construct adaptations for equipment and to adjust work procedures.

g) the willingness of the employer to hire this person.

To examine the job itself, the following outline might be helpful:

Name of Employer:________________ Address:____________________________

Job Title:____

Number of persons in organization currently employed at this job:________

Job Analyst____________________________

A. Describe the tasks which constitute this job:

1. ____
2. ____
3. ____
4. ____

5. ____________________

6. ____________________

7. ____________________

B. Analysis of Job Requirements

Description or Comments

1. *Computational Skills*
   A. Adding ____________________
   B. Subtracting ____________________
   C. Multiplying ____________________
   D. Dividing ____________________
   E. Simple Fractions ____________________

2. *Measurements Skills*
   A. Number Recognition ____________________
   B. Making Change ____________________
   C. Price Evaluation ____________________
   D. Use of Measuring Devices ____________________

3. *Communication Skills*
   A. Reading ____________________
   B. Writing ____________________
   C. Talking ____________________
   D. Following Instructions ____________________
   E. Use of Telephone ____________________

4. *Physical Demands*
   A. Lift, Carry, Push, Pull ____________________
   B. Walk, Run, Climb, Balance ____________________
   C. Stoop, Kneel, Crouch, Crawl ____________________
   D. Reach, Handle, Finger, Feel ____________________
   E. Stand, Sit, Turn ____________________
   F. Talk, Hear, See ____________________
   G. Color Vision, Depth Perception ____________________

Description or Comments

5. *Working Conditions*
   A. Extreme Hot or Cold________________
   B. Inside or Outside________________
   C. Humid________________
   D. Wet or Dry________________
   E. Dusty or Dirty________________
   F. Noise________________
   G. Adequate Lighting________________
   H. Adequate Ventilation________________
   I. Fumes, Odors, Gases, Mists________________
   J. Mechanical Hazards________________
   K. Electrical Hazards________________
   L. Explosives________________

6. *Manipulative*
   A. Hand Tools________________
   B. Machine Tending________________
   C. Machine Operation________________
   D. Machine Set-up________________
   E. Hand Work (Sort, Fold)________________
   F. Specific Skills________________

7. *Special Conditions*
   A. Tension (Deadlines, Etc.)________________
   B. Distracting Conditions________________
   C. Strenuous________________
   D. Training________________
   E. Responsibility________________

8. *Personal*
   A. Reliable, Prompt________________
   B. Appearance________________
   C. Supervision________________
   D. Safety (Self, Others)________________
   E. Work with Others________________

C. On the average how many hours a day does the employee spend at this job? ____

D. Based on an average day, indicate the number of hours the employee spends at each of the tasks listed above. Mark the hours in the column to the right of the tasks.

E. What is the training requirement for the job?

a. Less than high school education
b. High School Graduate
c. Specific Technical Training. Specify: ____________________
d. College Education. Major: ____________________________
e. Apprenticeship
f. Trained by employer on the job
g. Other. Describe: ________________________________

F. What is the salary range for this job? ______________________

G. If workers are promoted, to what jobs are they usually promoted?

____

H. Is union membership required? ____________________________

I. Which of the following best describes the relationship among co-workers?
1. Close knit group, often get together socially.
2. Friendly, but not cliquish.
3. Little communication among workers.
4. Tend to scapegoat fellow employees they don't like.
5. Other ____

J. Based on current *employees'* comments, what do they say a student would have to know to survive in this job? ________________________

K. What are the personal qualities the *employer* states are needed to survive on this job? ____________________________________

Job Redesign

After conducting a detailed job analysis, your information might indicate the need for job redesign. There are several possible ways to do this. Among them are these:

a) *Job pairing*. Two people divide one full-time job with equal responsibilities for the total job.

b) *Job sharing*. Two employees divide one job with each responsible for ½ the work load.

c) *Split level*. One position is divided into two skill and pay levels; one level is professional, the other a skilled para-professional, non-professional, or clerical.

d) *Split location*. A job done partly at the work site and partly at home.

e) *Part time*. Short term full time, or a contract/consultant basis for a limited time.

f) *Reassigning*. Of relatively minor, extraneous tasks (which are potential obstacles to employment) to another person or to another job classification.

g) Development or acquisition of "home made" jigs or commercially made devices to overcome or compensate for the new employee's functional limitations.

Job Placement

Assistance in placing the newly trained job seeker in employment is crucial for several reasons:

a) Years of effort on your part and the trainee's will be wasted if he or she fails to become employed.

b) Employers still harbor many unfounded myths about the capabilities of people with cognitive, affective or psychomotor dysfunctions. The newly trained job seeker may need assistance in overcoming these obstacles.

c) The newly trained job seeker may be relatively unskilled in job seeking, job acquisition and/or job retention.

Two general approaches have been developed to help people find and retain suitable employment: the "client centered" approach and the "selective placement" approach. The "client centered" approach stresses the preparation of the job seeker to find and acquire a job. It stresses the development of job seeking skills, interview skills, and other behaviors which have a bearing on the success of a person's job hunt.

The "selective placement" method is often used with people who have severe dysfunctions (or problems viewed as such by employers). Such persons could perform well on specific jobs, with proper training and job re-design, but have great difficulty negotiating the obstacles and requirements found in the hiring process.

It is beyond the scope of this publication to describe in detail either of these approaches. However, I would like to provide you with some resources which you could use to become more familiar with these methods. The first resource consists of two suggested lesson plans which you could use with your non-disabled students (or fellow staff if you are responsible for inservice training). The second resource consists of a bibliography of material which addresses the factors involved in finding, obtaining, and retaining suitable employment. Many of these materials could benefit any job seeker.

LESSON PLAN #6: JOB PLACEMENT: THE EXPERIENCE OF BEING HANDICAPPED

Student Objectives

1. The student will be able to describe the emotional and practical impact of a temporary disability on his or her functioning.

2. The student will be able to articulate (and by inference experience) greater empathy toward disabled people.

Preparatory Activities

Instructor Preparation:

1. Obtain: develop or borrow materials suitable for use in an assembly line task, given the facilities you have available. (A sheltered workshop might loan you suitable materials, or even let you use their facility after their clients have finished the days work.)
2. Obtain: materials such as wheel chairs, crutches, material for blindfolds, earplugs, and mittens to simulate disabilities. Mittens can simulate poor finger dexterity; shoes tied with a short rope can simulate slow mobility; restricting the use of one arm can simulate a dysfunctional upper extremity.
3. Prepare: "behavioral dysfunction" roles to be played during the exercise: a) inappropriately seductive person; b) very upset (angry) person; c) very withdrawn (depressed) person.

Student Preparation: None

Materials Needed:

1. Components for use in an assembly line task.
2. Equipment for use in simulating disabilities.
3. Sufficient copies of the "roles to be played" scripts.

Class Activities

1. Introduce the purpose of the exercise (experience what it is like to function as a disabled person).
2. Divide into work groups of 10-12 if group is large.
3. Appoint a leader for each group and allow some time for everyone to work at the assembly task until they are familiar with it.
4. Issue each person except the leader a disability. Have them continue working.
5. For those receiving the "behavioral dysfunction" roles (three per group;

one of each problem area) instruct them not to share the topic of their role with anyone and only act it out when signalled (e.g., "All who are person A, please begin your role").

6. Allow the experience to proceed. If you have a large block of time (e.g., 5-8 hours) continue the simulation through lunch. You could program in "fire drills," visits by "outside inspectors" or "high level administrators," "parents," "employers," or others to add to the experience. These roles could be taken by you, other staff members or students. Instruct participants to maintain their roles until the scheduled end of the experience, but to drop their "disability" and continue as a non-handicapped person if they become very uncomfortable.
7. Process the participants' reactions to the experience. Note practical as well as emotional issues.

Follow-Up Activity

Presentations on "the psychological aspects of disability," and ways to overcome disabilities which could handicap people for particular jobs.

1. Developing and practicing a "client centered" approach to the job placement of severely disabled job seekers.
2. Techniques of job analysis.
3. Strategies for helping an employer create or restructure a job.
4. Developing students' job seeking skills (job finding, application, interview techniques) and the competencies needed to develop those skills in others.
5. Current legislation on the employment of the handicapped (e.g., the Rehabilitation Act of 1973, Sections 503 and 504) and relevant court rulings.

6. Sources of job leads, how to utilize them most effectively, and how to instruct others to utilize them.
7. The experience of actually applying for several types of jobs.

LESSON PLAN #7: JOB PLACEMENT: DEVELOPING ANSWERS TO "PROBLEM QUESTIONS"

Student Objectives

1. The student will experience the difficulty caused by questions covering problem factors when the interviewee is unprepared.
2. The student will learn to recognize factors which could be difficult to explain during a job interview.
3. The student will develop responses to such factors.

Preparatory Activities

Instructor Preparation:

Review: Job Seeking Skills Reference Manual, Multi-Resource Centers, Inc., Minneapolis, Minnesota.

1. Prepare: Two one-page bibliographies to be used by "interviewees" in a simulated interview. Include all factors which could require an explanation: arrest records, prison record, treatment or hospitalization for psychiatric problems, alcohol and other drug involvement, poor work references, evidence of job hopping, insufficient education (or too much), slow in learning (mentally retarded), too young (or too old) for the job, unfavorable military discharge, physical mobility problems, no work experience in the job area under consideration, epilepsy (controlled), severe allergy, blindness, facial disfigurement, hearing impairment, amputation, and any other problems you feel would be difficult to explain to a potential employer. You might have each "biography" contain half the problems listed, so that each "interviewee" will have new issues to contend with. Also prepare an interview format listing topic areas to be covered by the "interviewer."

2. Duplicate: sufficient copies of each item.

3. Prepare: possible answers to problem questions which could be posed by an interviewer.

Student Preparation: None

Materials Needed:

Copies of biographies and interviewer's guide referred to above.

Class Activities

1. Explain purpose of lesson: learning to recognize and deal with "problem questions," so you can help job seekers learn to do so.
2. Pair people into dyads: designate interviewer and interviewee in each dyad.
3. Issue one of the biographies and the interview guide to appropriate recipients.
4. Direct them to read their handouts, then role play an interview for a specific job. You may select a real job, or make one up (on a humorous vein) which would require them to explain issues created by all their listed "problems."
5. After an appropriate interval, issue the second biography and interview guide to appropriate recipients, and repeat the simulated interview process for another job.
6. Process the emotional experiences of the participants.
7. Instruct participants to develop suitable answers. You may have them work in teams on specific problem questions.
8. Share results, and some alternatives you have developed.

Follow-Up Activity

In conjunction with the class, compile a manual for various responses to problem questions. Develop a practicum in which students can try to help actual job seekers with such problems obtain employment.

Selected References on Job Placement

Azrin, N. H., Flores, T. and Kaplan, S. T. "Job-finding club: a group-assisted program for obtaining employment." *Behavior Research and Therapy*. 1975, *13*, pgs. 17-27.

Bishop, R., Perres, A. M. and Wheeler, D. E. *Job Search, Seizure, Survival*. Chicago: V Mark Publishing Co., 1976. (Has Companion Teacher's Guide.)

Blum, L. P. and Kujoth, R. K. *Job Placement of the Emotionally Disturbed*. Metuchen, New Jersey: The Scarecrow Press, Inc., 1972.

Bolles, R. N. *The Three Boxes of Life and How to Get Out of Them*. Berkeley, California: Ten Speed Press, 1978.

Bowman, J. T. and Graves, W. H. (eds.) *Placement Services and Techniques*. Champaign, Illinois: Stipes Publishing Company, 1976.

Brolin, D. E. *Vocational Preparation of Retarded Citizens*. Columbus, Ohio: Chas. E. Merrill Publishing Company, 1976.

Brolin, D. and Kokaska, C. "Critical issues in job placement of the educable mentally retarded." *Rehabilitation Literature*. 1974, *35*, pgs. 174-177.

Cook, P. F., Dahl, Peter R. and Gale, Margaret Ann. *Vocational Opportunities: Vocational Training and Placement of the Severely Handicapped*. Salt Lake City: Olympus Publishing Company, 1978.

Dunn, D. J., Currie, L., Menz, F., Scheinkman, N. and Andrew, J. *Placement Services in the Vocational Rehabilitation Program*. Menomonie, Wisconsin, University of Wisconsin-Stout, Research and Training Center, December, 1974.

Flannagan, T. "Whatever happened to job placement." *Vocational Guidance Quarterly*. 1974, *22*, pgs. 209-213.

Guide to Job Placement of Mentally Restored People. Washington, D.C., The President's Committee on Employment of the Handicapped, 1977.

Guide to Job Placement of the Mentally Retarded. Washington, D.C., The President's Committee on Employment of the Handicapped, 1974.

Hagestuen, L., et al. Vocational Education Work Experience Program for Handicapped Students: Teacher-Coordinator Handbook. White Bear Lake, Minnesota: Minnesota Instructional Materials Center, 1977.

Housman, R. and Smith, D. "Placement for persons with severe physical disabilities." Rehabilitation Counseling Bulletin. 1975, 18, pgs. 245-252.

Jacobsen, R. J., Vandergout, D., Avellani, P. B. with Swirsky, J. A Review of Placement Services Within a Comprehensive Rehabilitation Framework. Albertson, New York: Human Resources Center, 1978.

Janis, I. and Wheeler, D. "Thinking Clearly About Career Choices." Psychology Today, May, 1978, 67-76, 121-122.

Job Development Reference Manual. Minneapolis, Minnesota, Minneapolis Rehabilitation Center, Multi Resource Centers, Inc. 1971.

Job-Seeking Skills Workbook. Minneapolis, Minnesota, Minneapolis Rehabilitation Center, Multi Resource Centers, Inc. 1972.

Johnson, M. and Sugarman, M. Job Development and Placement: CETA Program Models. Washington, D.C.: U.S. Department of Labor, 1978.

Jones, R. J. and Azrin, N. H. "An experimental application of social reinforcement approach to the problem of job finding." Journal of Applied Behavior Analysis. 1973, 6, pgs. 345-353.

Keith, R. D. Employment Seeking Preparation and Activity. East Lansing, Michigan, Preval Company, 1976.

Keith, R. D. Job Placement Trainer's Guide: Employment-Seeking Preparation and Activity. East Lansing, Michigan, Preval Company, 1977.

Kosmo, S. J. and Novak, J. (eds.) Orientation to the Job Placement Process. Madison, Wisconsin: Wisconsin Vocational Studies Center, 1978.

Mori, A. "Annotated Bibliography of Pre-Vocational and Vocationally Oriented Materials for Secondary Educable Mentally Retarded Pupils." Education and Training of the Mentally Retarded. 1978, 13, 47-54.

National Association for Industry Education Cooperation. Placement Services, A Training Manual. Ann Arbor, Michigan: Parkken Publications, Inc., 1977.

Phelps, L. A. and Lutz, R. J. *Career Exploration and Preparation for the Special Needs Learner*. Boston: Allyn & Bacon, 1977.

Salomone, P. R. "Career counseling for handicapped persons." In: *Colloquium Series on Career Education for Handicapped Adolescents*. West Lafayette Indiana: Special Education Section, Department of Education, Purdue University, 1977.

Salomone, P. R. (ed.) "Placement in the rehabilitation process." *Rehabilitation Counseling Bulletin*. 1977, *21*, (2), entire issue.

Scelfo, J. L. and Micali, J. "Vocational Program for the Trainable Mentally Retarded Student." *Education*. 1978, *98*, 460-461.

Schroedel, J. G. *Attitudes Toward Persons with Disabilities*. Albertson, New York: Human Resources Center, 1978.

Schroedel, J. G. and Jacobsen, R. *Employer Attitudes Towards Hiring Persons with Disabilities, A Labor Market Research Model*. Albertson, New York: Human Resources Center, 1978.

Second Institute on Rehabilitation Issues. *Placement of the Severely Handicapped: A Counselor's Guide*. Institute, West Virginia; West Virginia Research and Training Center, 1975.

Sigler, G. R. and Kokaska, C. J. "A job placement procedure for the mentally retarded." *Education and Training of the Mentally Retarded*. 1971, *6*, pgs. 161-166.

Sinick, D. *Occupational Information and Guidance*. Boston: Houghton Mifflin, 1970.

Sinick, D. "The job placement process." In: H. Rusalem and D. Malekin (eds.) Contemporary Vocational Rehabilitation. New York: New York University Press, 1976.

Suazo, A. C. *Job Redesign: Work Improvement Series for Handicapped Workers. Unit Two*. Washington, D.C.: Goodwill Industries of America, Inc., 1974. (Workbook, slides, cassette.)

Turner, R. J. "Jobs and Schizophrenia." *Social Policy*. 1977, *8*, 32-40.

Usdane, W. "The placement process in the rehabilitation of the severely handicapped." *Rehabilitation Literature*. 1976, *37*, pgs. 162-167.

Vandergoot, D., Avellani, P. B., and Jacobsen, R. J. A Compendium of Placement Related Literature. Albertson, New York: Human Resources Center, 1978.

Warren, F. G. "Preparing the Handicapped for Gainful Employment." In G. M. Blackburn (ed.), Colloquium Series on Career Education for Handicapped Adolescents. West Lafayette, Indiana: Purdue University Department of Education, 1976.

White, B. Job Placement and Job Development. Chicago, Illinois: Jewish Vocational Service, 1976.

Wolfensberger, W. "Vocational preparation and occupation." In: A. A. Baumeister (ed.) Mental Retardation. Chicago, Aldine, 1967.

A WORD ABOUT AUDIO-VISUALS AND OTHER INSTRUCTIONAL MATERIALS

Variables which can attract and maintain a person's attention include motion, color, contrast, variety, and reference to personally meaningful experiences, values, or interests. In acquiring and using audio-visual material, keep in mind that a good visual has one idea, print legibility, imaginative design, and visual clarity. (If you prepare your own visuals, don't clutter them with many details.) When projecting visual images onto a screen, be sure that the smallest image seen has at least one inch of height for every thirty feet of distance between the screen and the viewers.

For many educational needs, you will probably have to adopt commercially produced materials. You may find that the following organizations have developed materials which can help you serve students with cognitive, affective, or psychomotor difficulties.

Academic Therapy Publications, P.O. Box 899, 1539 Fourth St., San Rafael, California 94901. This organization produces and sells tests, books, and materials for and about the learning disabled. Their publications are usually very high in quality and utility.

Addiction Research Foundation, Marketing Services, 33 Russell St., Toronto, Canada M5S2S1. This organization seels materials which deal with chemical abuse. They are of interest to both practitioner and researcher.

American Association for Vocational Instructional Materials, Engineering Center, University of Georgia, Athens, Georgia 30602. This organization sells vocationally related materials, some of which deal with the vocational education of handicapped students.

American Foundation for the Blind, 15 W. 16th St., New York, New York 10011; (214) 924-0420. This organization provides lists of materials, including films available for sale or rent.

American Institutes for Research, P.O. Box 1113, 1791 Arastradero Road, Palo Alto, California 94302; (415) 493-3550. This organization has undertaken several federally funded projects dealing with handicapped people in various educational settings.

The Center for Vocational Education, 1960 Kenny Road, Columbus, Ohio 43210. This organization sells material which deals with all aspects of vocational education.

Clearinghouse on the Handicapped, Office of Handicapped Individuals, Department of HEW, 3380 Hubert F. Humphrey Bldg., 200 Independence Ave., S.W., Washington, D.C. 20201. This government agency distributes materials relating to people with handicaps.

The Council for Exceptional Children, 1920 Association Drive, Reston, Virginia 22091. This organization sells materials dealing with mental retardation.

Edmark Associates, 13241 Northup Way, Bellevue, Washington 98005; (800) 426-0856. This company sells special education related instructional materials. Many are quite useful and suitable for adaptation to different instructional contexts.

Great Plains National Instructional Television Library, Box 80669, Lincoln, Nebraska 68501. This organization lists newly produced TV programs and reviews them in a periodic newsletter.

Hazelden Literature Department, Box 176, Center City, Minnesota 55012; (618) 328-9288. This private treatment facility for chemical abusers also develops, publishes and sells materials on chemical abuse. They produce some of the best materials available on and for the alcoholic and other chemical abusers.

Institute for Child Behavior and Development, University of Illinois at Urbana-Champaign, 51 Gerty Drive, Champaign, Illinois 61820: (217) 333-8285. Dr. Marc Gold, a staff member of this organization, has developed several publications on the vocational training of retarded people including retarded adults. He has also developed a series of staff training films on his methodology. The first film in the series is entitled "Try Another Way."

Lawren Productions, P.O. Box 666, Mendocino, California 95460: (707) 937-0536. This company has several excellent films available for sale or rental, including two films which deal with learning disabled adolescents: (1) "If a boy can't learn" and (2) "The reluctant delinquent."

Link Educational Laboratories, Box 25, Hope Hull, Alabama 36043. This firm sells reasonably priced kits which can be used to enhance overhead transparencies or other visuals.

Materials Development Center, Stout Vocational Rehabilitation Institute, School of Education, University of Wisconsin-Stout, Menomonie, Wisconsin 54751. In addition to developing and selling instructional materials, the Center also reviews materials available from other sources in a monthly newsletter. Many of the materials developed by the Center deal with vocational assessment methodology.

Mental Health Association, Publications Department, 1800 N. Kent St., Arlington, Virginia 22209. This organization sells materials dealing with emotional problems. State mental health associations often provide similar material either free upon request or for a reasonable price.

Minnesota Instructional Materials Center, 3554 White Bear Ave., White Bear Lake, Minnesota 55110: (800) 652-9024. This organization sells material dealing with many aspects of vocational education including education of handicapped people.

Multi-Resource Center, Inc., 1900 Chicago Avenue, Minneapolis, Minnesota 55404. This organization sells materials dealing with handicapped people. Much of their material deals with assisting handicapped people to prepare for, obtain and hold a job.

National Association of the Deaf, 814 Thayer Avenue, Silver Spring, Maryland 29010. This organization sells material related to working with deaf and hearing impaired people in educational and other contexts.

National Association for Retarded Citizens, 2709 Avenue E East, P.O. Box 6109, Arlington, Texas 76011. This organization sells materials which deal with consideration relevant to the effect of service to retarded people in educational, occupational and health settings.

National Cearlinghouse for Rehabilitation Training Materials, Oklahoma State University, 115 Old USDA Bldg., Stillwater, Oklahoma 74074. (405) 624-7650. This organization provides vocational rehabilitation materials either free or for a reasonable price.

National Institute on Alcohol Abuse and Alcoholism, P.O. Box 2345, Rockville, Maryland 20852. This government sponsored agency makes available a great deal of information on alcoholism. Many of the materials are free upon request. Other items are nominally priced. One item available for purchase is a catalogue summarizing films and other media available on alcoholism and alcoholism education.

National Institute on Drug Abuse, 11400 Rockville Pike, Rockville, Maryland 20852. This government funded agency makes available materials on chemical abuse. Many are free upon request. Others are sold at reasonable prices. One publication available for purchase is a catalogue listing films and other media available on chemical abuse and drug education.

National Rehabilitation Information Center. This is a newly organized information Center which will provide information of interest to both practitioners and researchers. For information about their services, contact Ms. Judith J. Senkevitch, Graduate Department of Library Science, Catholic University of America, Washington, D.C. 20064.

New Jersey Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Building 4103, Kelmer Campus, New Brunswick, New Jersey 08903. This organization develops and sells curriculum materials for vocational, technical, special needs, and career education. Prices are reasonable.

Nisonger Center on Mental Retardation and Human Development, McCampbell Hall, 1580 Cannon Drive, Columbus, Ohio 43210. This organization sells materials on retardation.

POP Kit Pre-Service Occupational Program, Illinois Office of Education, Division of Adult Vocational, Technical Education, 100 N. First St., Springfield, Illinois 62777. These kits were designed for teacher training in a vocational context.

Presidents Committee on Employment of the Handicapped, Washington, D.C. 20210. This government agency distributes materials free upon request.

Project MORE, George Peabody College for Teachers, Box 318, Nashville, Tennessee 37203. This project has developed an excellent series of materials on training retarded people in daily living skills. Their products can be purchased through Hubbard, P.O. Box 104, Northbrook, Illinois 60062; (312) 272-7810.

Rehabilitation Research and Training Center in Mental Retardation, 2nd Fl., Clinical Services Building, University of Oregon, Eugene, Oregon 97403. This organization develops and publishes materials relevant to the education and training of retarded persons, including severely and profoundly retarded people. Their materials are excellent and reasonably priced.

Research and Training Center, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, Menomonie, Wisconsin 54751. This organization sells materials for use in training handicapped people in vocational settings (including sheltered workshops). Their materials are excellent and reasonably priced.

Vocational Curriculum Management Center Library, Commission for Vocational Education, Building 17, Airdustrial Park, Olympia, Washington 98504. This Center sells lists of curriculum materials in several areas which can be ordered from various sources.

Wisconsin Vocational Studies Center, University of Wisconsin-Madison, 964 Educational Sciences Bldg., 1025 W. Johnson St., Madison, Wisconsin 53706; (608) 263-3696. This organization sells material relevant to vocational educators. Areas covered include guidance and the VTEC's series. A significant proportion of these materials deal with the process of educating handicapped students in a vocational setting. They are quite good and are reasonably priced.

APPENDIX A

The Structured Overview

SHOULDER MUSCLES

KEY CARD

1. pectoralis major -- horizontal adduction
2. latissimus dorsi -- extension
3. teres major -- internal rotation
4. deltoid -- abduction, horizontal abduction, flexion
5. teres minor -- external rotation
6. infraspinatus -- external rotation
7. subscapularis -- internal rotation
8. supraspinatus -- abduction

MUSCLE CARDS

Before students can develop many of the physical therapist assisting skills (such as massage and therapeutic exercise), they must master the names, locations, and fuctions of the body's major muscle groups. This material is presented in PTAsst 127 - Muscles and Motions. Many students often have difficulty memorizing the origins and insertions, visualizing the location of the muscles on the skeleton, and transferring this information to correctly palpate the muscles on other persons.

These muscle cards are to be used by students in independent study of this material. The student is to match the card showing the picture of the muscle with the cards giving the origin, name, insertion, action, and a stick figure of the action. The cards have been coded with numbers on the back to give the student immediate feedback to his/her responses. The cards can be easily sorted by color according to origin, insertion, etc. so that a particular area that a student is having difficulty with can be emphasized. For example, a student who is having difficulty visualizing the motions shown on the orange cards can practice matching them with the stick figures on the white cards. A student having difficulty learning the names of muscles can use the pink cards to see the words and the green cards to identify the pictures of the muscles. (cont'd)

During the lab sessions, the cards can be mixed and randomly selected by students who will then find on their partners the muscle identified by the cards they have selected.

An audio-cassette can be prepared to be used with the green picture cards and pink name cards to assist those students who have difficulty with pronunciation of the words.

A master key card is included so two students can quiz each other to reinforce the verbal/auditory recognition of this material through flash card approach.

LATISSIMUS DORSI

PECTORALIS MAJOR

2

1

TERES MAJOR

DELTOID

3

4

TERES MINOR

INFRASPINATUS

5

157

6

SUBSCAPULARIS

SUPRAPINATUS

7

8

O.

MEDIAL CLAVICLE
STERNUM
CARTILEGES OF FIRST 6 RIBS

O.

LOWER 6 THORACIC AND ALL
LUMBER VERTEBRAE
SACRUM
CREST OF ILIUM
LOWER 3 RIBS

1

2

○

INFERIOR ANGLE OF SCAPULA

○

LATERAL 1/3 CLAVICLE
ACROMION
SPINE OF SCAPULA

3

4

LATERAL BORDER OF SCAPULA

INFRASPINOUS FOSSA

5

6

SUPRASPINOUS FOSSA

ANTERIOR SCAPULA

8

7

1.

BICIPITAL GROOVE

1.

LATERAL HUMERUS

3

2

1

4

169

1.

GREATER TUBEROSITY

1.

LESSER TUBEROSITY

6
5

7

1.

TOP OF GREATER TUBEROSITY

8

SHOULDER HORIZONTAL ADDUCTION

SHOULDER EXTENSION

1

2

SHOULDER FLEXION

SHOULDER HORIZONTAL ABDUCTION

4

4

SHOULDER EXTERNAL ROTATION

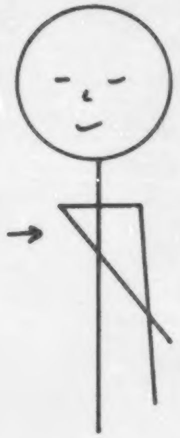
SHOULDER INTERNAL ROTATION

6
5

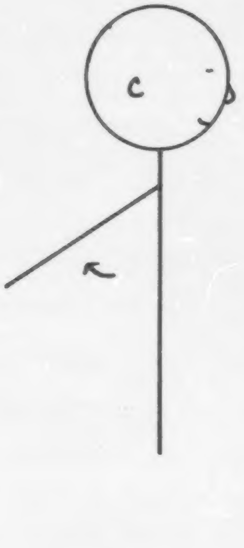
7
3

SHOULDER ABDUCTION

8
4



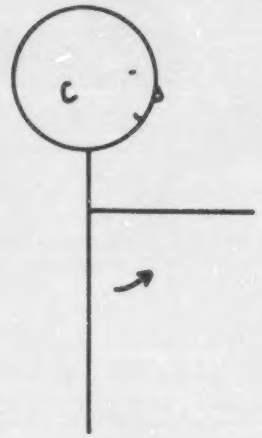
TAKE ARM
ACROSS CHEST



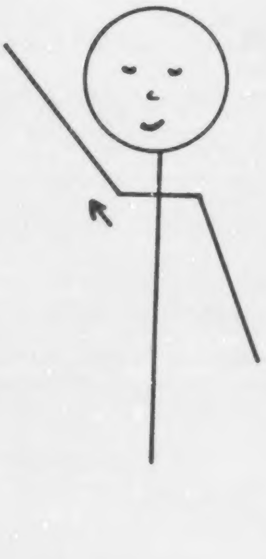
TAKE ARM
STRAIGHT BACK

1

2



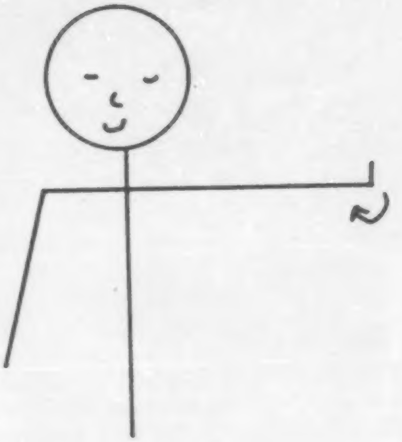
TAKE ARM UP IN
FRONT OF YOU



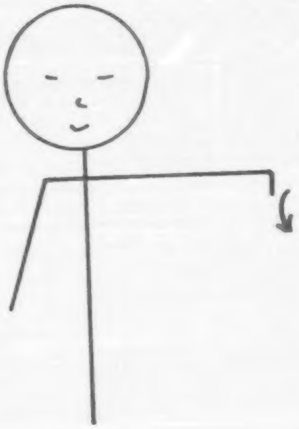
TAKE ARM AWAY FROM
SIDE AND TAKE ARM BACK

ANTERIOR 4

POSTERIOR 4



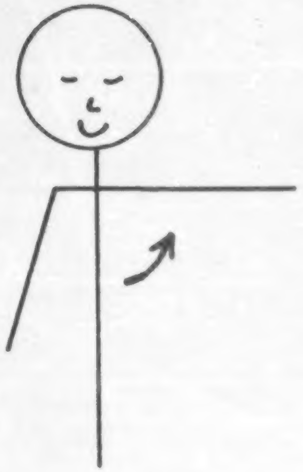
TAKE ARM AWAY FROM
SIDE AND TURN HAND
TOWARDS CEILING



TAKE ARM AWAY FROM
SIDE AND TURN HAND
TOWARDS FLOOR

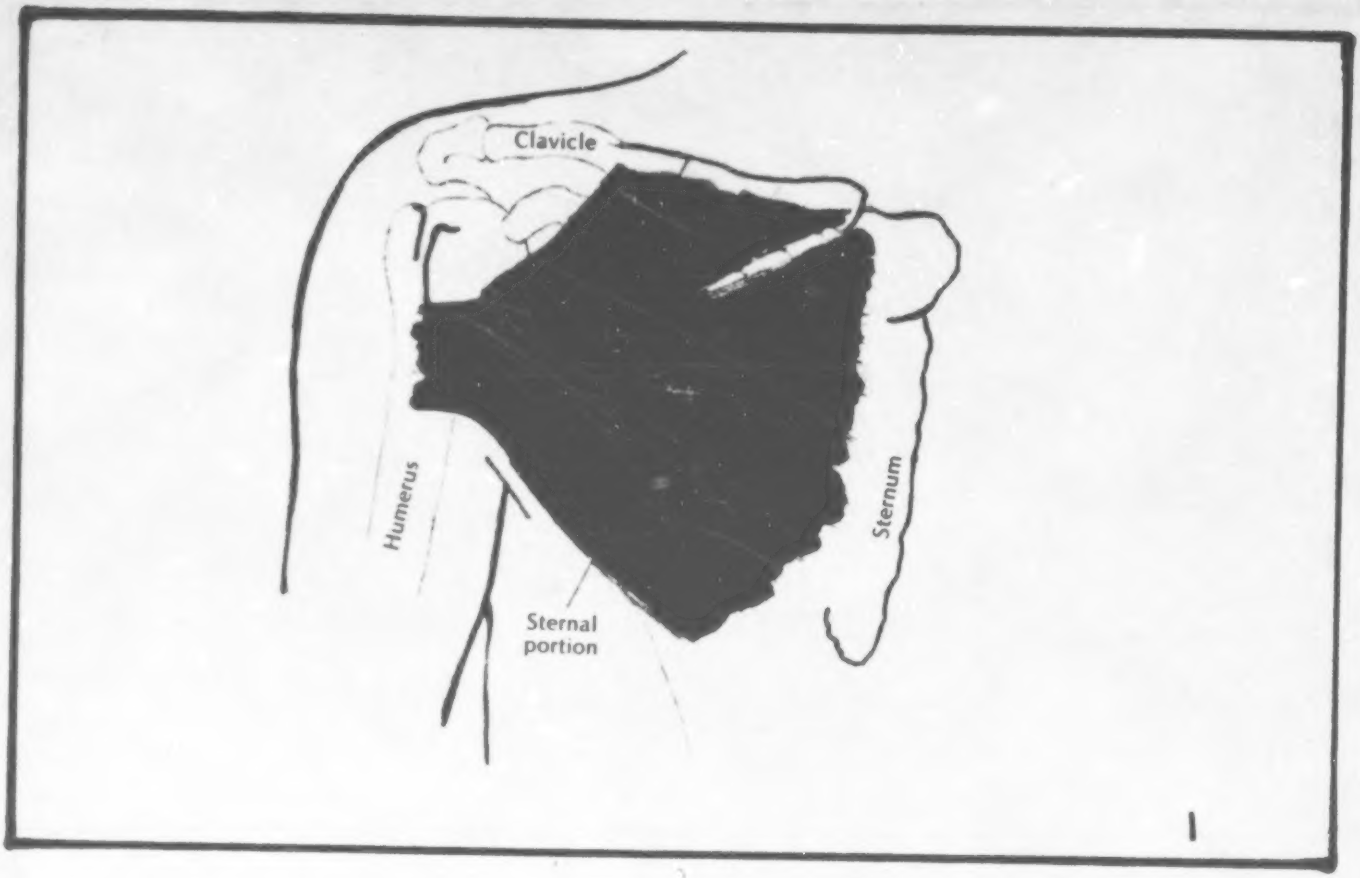
6
5

7
3

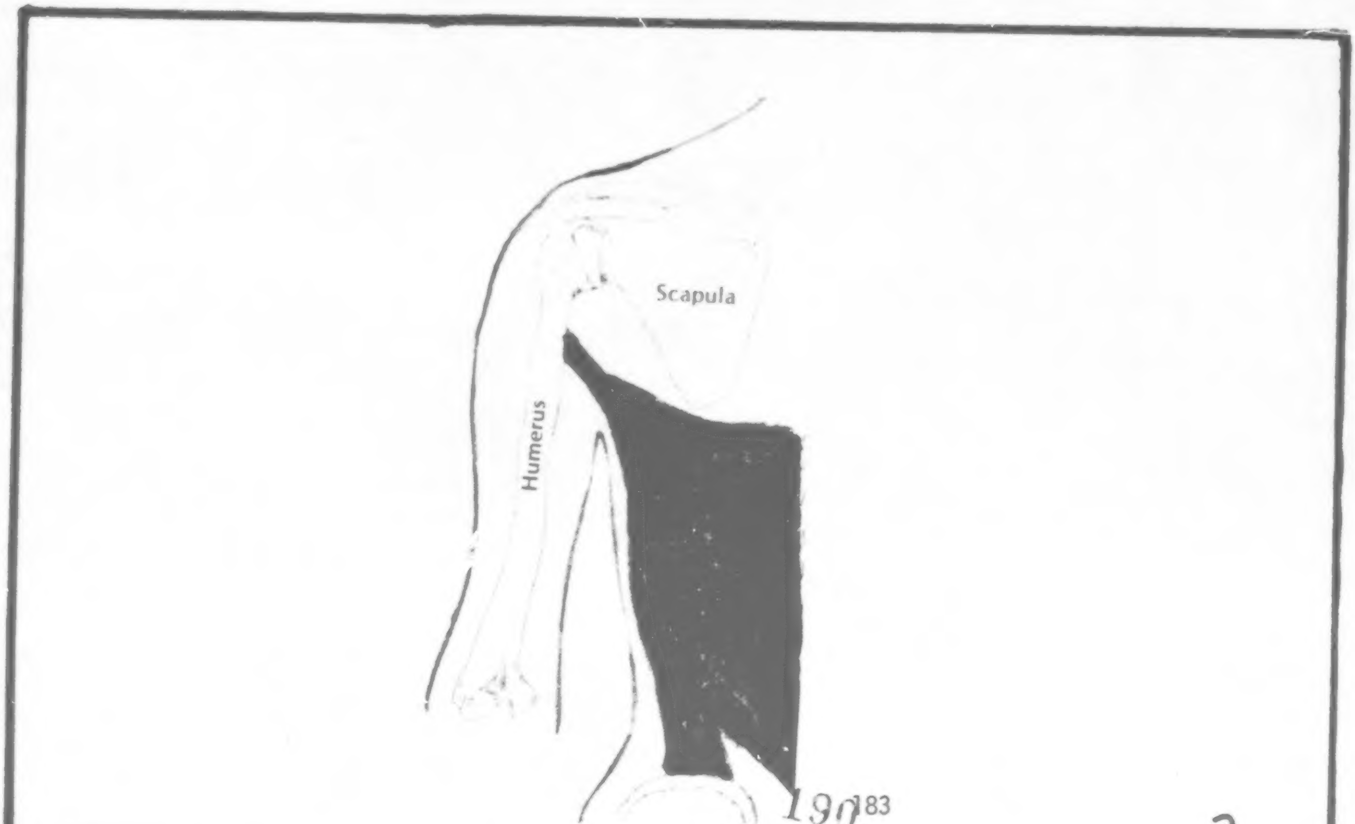


TAKE ARM AWAY
FROM SIDE

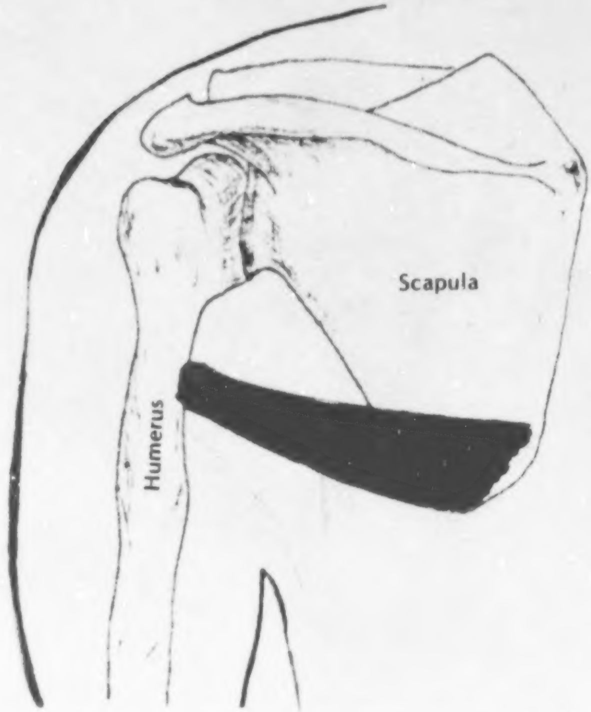
8
MIDDLE 4


Clavicle
Humerus
Sternal portion
Sternum

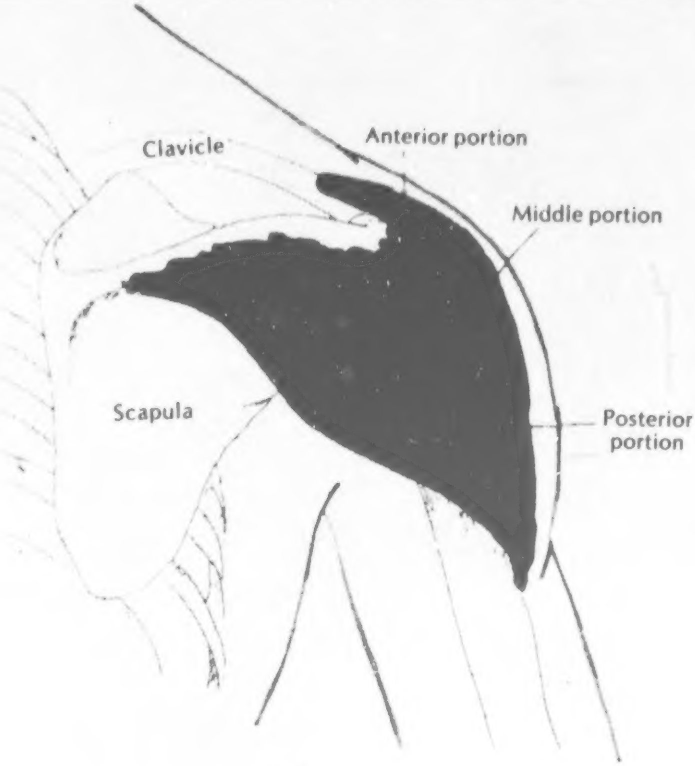
1


Scapula
Humerus

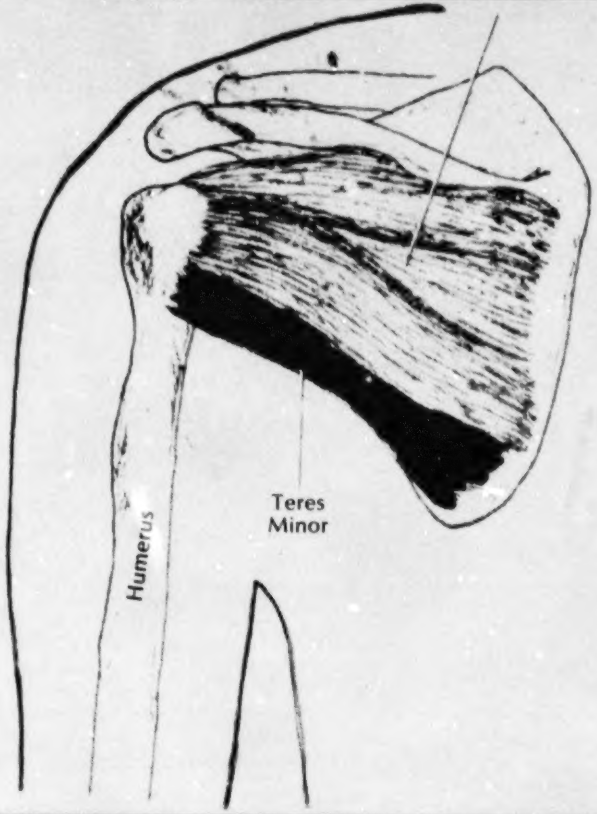
2


Scapula
Humerus

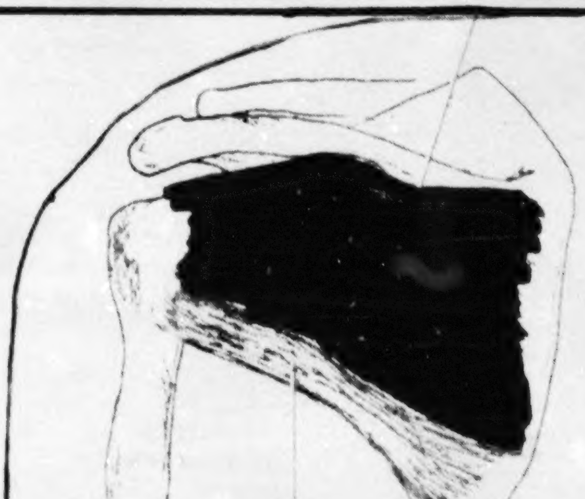
3


Clavicle
Anterior portion
Middle portion
Scapula
Posterior portion

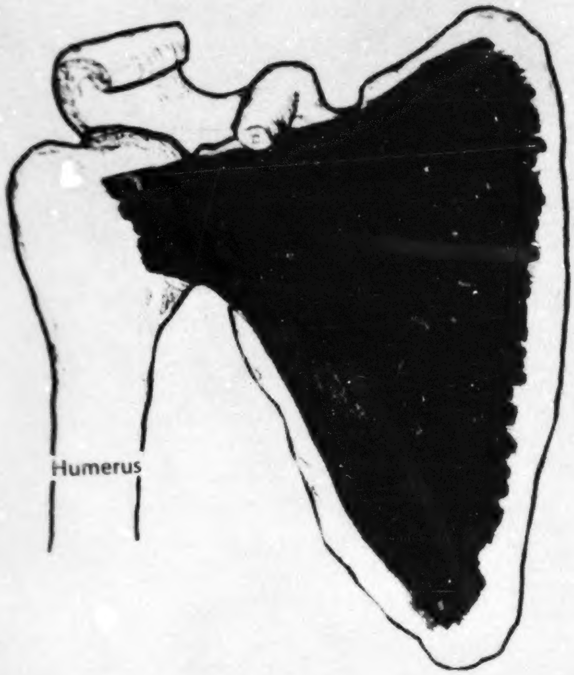
4.


Teres Minor
Humerus

5


Teres Minor
Humerus

6



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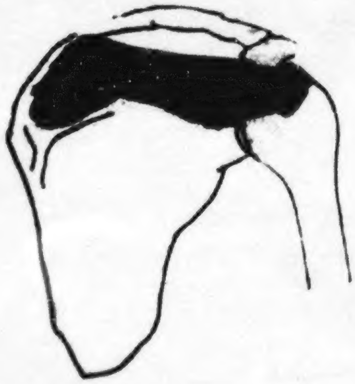

8

WISCONSIN VOCATIONAL STUDIES CENTER

The Wisconsin Vocational Studies Center at the University of Wisconsin-Madison was reorganized with the support of the Wisconsin Board of Vocational, Technical and Adult Education within the School of Education in 1971. The function of the Center is to serve the State of Wisconsin in a unique way by bringing the resources of the University to bear on identified problems in the delivery of vocational and manpower programs-vocational education, technical education, adult education, career education, manpower training-to citizens of all ages in all communities of the State. The Center focuses upon the delivery of services including analyses of need, target groups served, institutional organization, instructional and curriculum methodology and content, labor market needs, manpower policy, and other appropriate factors. To the extent that these goals are enhanced and the foci of problems widened to encompass regional and national concerns, the Center engages in studies beyond the boundaries of the State.

Merle Strong, Director
Roger Lambert, Associate Director

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